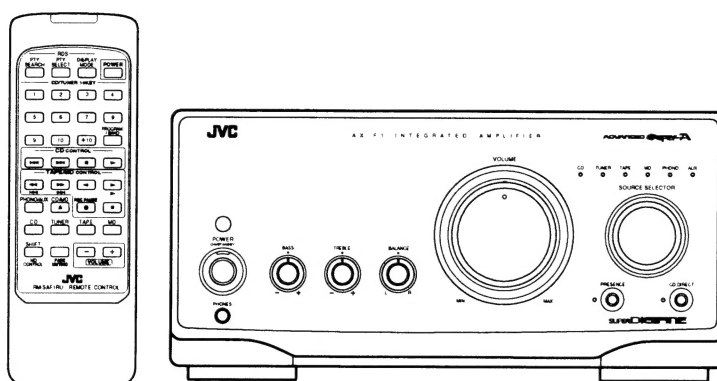


JVC

SERVICE MANUAL

INTEGRATED AMPLIFIER

AX-F1GD



Area Suffix

BS	....	the U.K.
EF	....	Continental Europe Except Germany and Italy
EN	....	Nordic Countris
G	....	Germany
GI	....	Italy
US	....	Singapore
UT	Taiwan
UB	Hong Kong
U	Other Area

COMPU LINK
 Remote Control Component

Contents

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<i>Description of Major ICs</i>	1-11	<i>Schematic Diagrams</i>	Insertion
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		<i>Parts List</i>	Separate-volume Insertion

Safety Precautions

1. The design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (Δ) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.

5. Leakage current check (Electrical shock hazard testing)

After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

Do not use a line isolation transformer during this check.

- Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.).

● Alternate check method

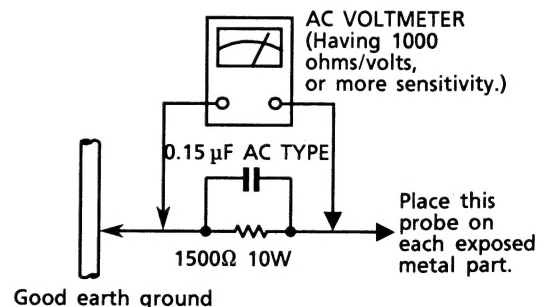
Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500 Ω 10 W resistor paralleled by a 0.15 μ F AC-type capacitor between an exposed metal part and a known good earth ground.

Measure the AC voltage across the resistor with the AC voltmeter.

Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor.

Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75 V AC (r.m.s.).

This corresponds to 0.5 mA AC (r.m.s.).



Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.



General Information

We would like to thank you for purchasing one of our JVC products. Before connecting this unit to the wall outlet, please read the instructions carefully to ensure that you obtain the best possible performance. If you have any questions, please consult your JVC dealer.

Important cautions

- 1. Installation of the Unit**
 - Select a place which is level, dry and neither too hot nor too cold (Between 5°C and 35°C or 41°F-95°F).
 - Leave sufficient distance between the Unit and a TV.
 - Do not use the Unit in a place subject to vibrations.
- 2. Power cord**
 - Do not handle the power cord with wet hands!
 - A small amount of power (8.5 watts) is always consumed as long as the power cord is connected to the wall outlet.
 - When unplugging the Unit from the wall outlet, always pull the plug, not the power cord.
- 3. Malfunctions, etc.**
 - There are no user serviceable parts inside. If anything goes wrong, unplug the power cord and consult your dealer.
 - Do not insert any metallic object into the Unit.

For safe use, observe the following

- Avoid moisture, water and dust**
Do not set your machine in moist or dusty places.
- Avoid high temperatures**
Do not expose your machine to direct sunlight or set near a heating device.
- Do not block the vents**
Poor ventilation may damage your machine. So do not block the vents nor put the unit in a poorly ventilated place.
- When you're away**
When away on travel or otherwise for an extended period of time, pull the plug from the outlet.
- Do not insert foreign matter into the machine**
Do not insert wires, hairpins, coins, etc. into your machine.
- Care of the cabinet**
When cleaning your machine, use a soft cloth and follow the relevant instructions on the use of chemically-coated cloths. Avoid applying benzene, thinner or other organic solvents and disinfectants. This may cause deformation or discoloring.
- If water gets inside the machine**
Cut the main power switch and pull the plug from the electrical socket, then call the store where you made your purchase. Using the machine in this state may cause a fire or electrical shock.

Features

- 50W + 50W (Rated output) Advanced Super A**
The power stage employs the 'Advanced Super A' circuit, more advanced than Super A, for improved linearity.
- PRESENCE: Sound heard easily, even at low volume**
By improving the realism of low sounds, and clarifying the outline of midrange sounds, playback is easily heard at low volume or when using small speakers.
- Supplied accessories (check before use)**
- Remote control (RM-SAF-TRU)..... (1)
 - Batteries R03 (UM-4) / AAA (24F) (2)

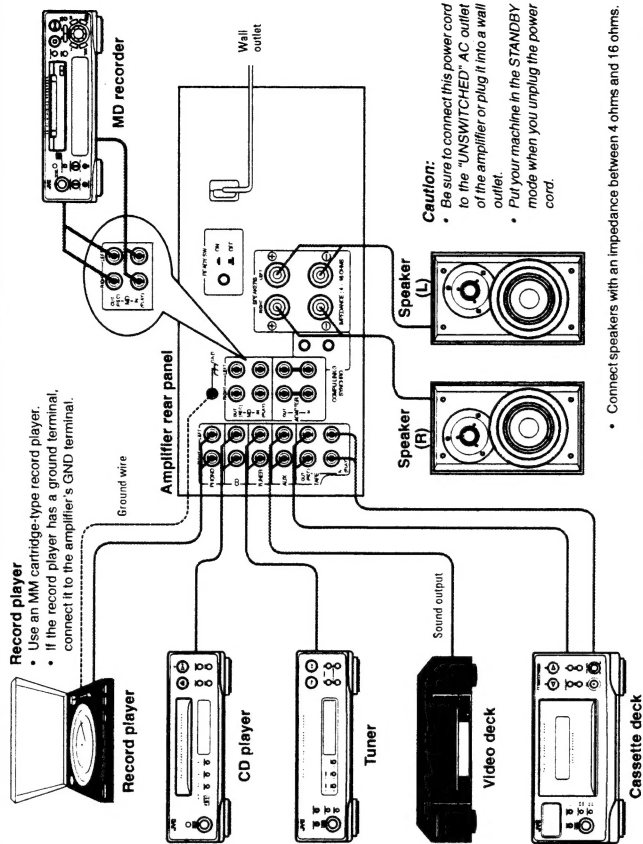
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Connections

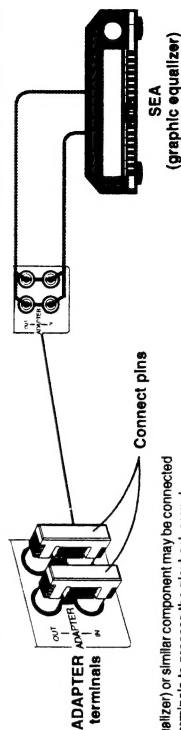
Be sure not to plug in the power cord until all other connections have been made.

Connection of other components



- Note:**
1. Switch the power off when connecting any components.
 2. Connect an amplifier with left and right channels connected correctly. Reversed channels will degrade the stereo effect.
 3. Connect plugs or cords firmly. Poor contact may result in hum.

ADAPTER terminals



- SEA (A graphic equalizer) or similar component may be connected to the ADAPTER terminals to process the playback sound.
- When making connections to the ADAPTER terminals, first remove the connect pins and keep them in a safe place.
- Be sure to leave the connect pins in the ADAPTER terminals when not using the terminals.
- Never insert the connect pins into any other than the ADAPTER terminals as this could result in malfunction.

Names and functions of parts

Front panel

BASS

Adjusts low pitch sounds. Turn right to accentuate these sounds, and left to tone them down.

TREBLE

Adjusts high pitch sounds. Turn right to accentuate these sounds, and left to tone them down.

BALANCE

Adjusts the left/right volume balance. Turn right to lower the left channel volume. Turn left to lower the right channel volume.

SOURCE SELECTOR

Use this to choose the source you want to listen to. The indicator for the source chosen lights on the amplifier.

CD: For listening to the CD player.

TUNER: For listening to the tuner.

TAPE: For listening to the cassette deck.

MD: For listening to an MD recorder.

PHONO: For listening to the record player.

AUX: For listening to an auxiliary component connected to the AUX terminal.

CD DIRECT

Allows the playback signal from the CD player to be output directly, without passing through the BASS, TREBLE, or BALANCE control circuits, or the PRESENCE circuit, for higher sound quality playback. The indicator lights when turned on.

PRESENCE

By improving the realism of low sounds, and clarifying the outline of midrange sounds, playback is easily heard at low volume or when using small speakers. The indicator lights when turned on.

VOLUME

Adjusts the volume of the speakers or headphones. The indicator lights when the power is turned on, and goes out when the power is turned off.

POWER

The indicator goes out when turned on. The indicator lights when turned off. The AX-F1GD goes into STANDBY.

PHONES (headphones)

Connection outlet for headphones.

Remote sensor

Supplying the AC power

Only when all the connections are completed, insert the power plug into the wall outlet. Next set the READY switch to ON. Then the STANDBY indicator lights and the setup is complete.

Connecting audio components for COMPLINK-3 Remote Control System

The COMPLINK-3 remote control system allows you to control other JVC audio components from the AX-F1GD or vice versa. To use this system, connect your JVC audio components and the AX-F1GD with the COMPLINK cord (monaural mini-plug) supplied. (See page 8 for details)

Using the remote control

Point the remote control towards the remote sensor of the AX-F1GD when you push the buttons. It may not work if there is an obstruction between the remote sensor and the remote control. In such a case, change the position of the machine, or remove the obstruction.

How to put batteries in the remote control

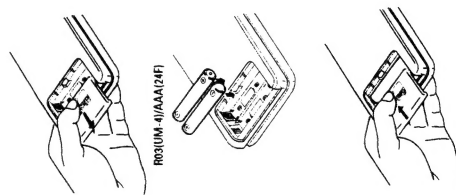
Match the polarity (+ and -) on the batteries with the + and - marking on the battery compartment.

Cautions:

- Observe the following to avoid battery leakage or explosion:
 - If the range or effectiveness of the remote control decreases, replace the batteries.
 - Remove batteries when the remote control will not be used for a long time.
 - When you need to replace the batteries, replace both batteries at the same time with new ones.
 - Don't use an old battery together with a new one.
 - Don't use different types of batteries together.
 - Strong impact on the remote control may cause batteries to drop out of the battery compartment.

Note

Point the remote control unit towards the remote sensor and operate it steadily and carefully. The remote control unit can be used within a range of about 7 meters (23 feet) from the remote sensor, and at angles of up to about 30 degrees.



RR31UM-4(AAA124F)

Using the amplifier

Listening to the desired source

1. **Turn the power on**
 - The STANDBY indicator goes off when the POWER button is pressed.
 - The remote controller can also be used to turn the power on.
2. **Choose the source you want to listen to**
 - Use the source selector to choose the source. The indicator of the chosen source lights.
 - The remote control can also be used to choose the source.
3. **Operate the component you chose**
 - Refer to the component's instructions.
4. **Adjust the volume**
 - Use the VOLUME knob to adjust the volume.
 - The remote control can also be used to adjust the volume.
5. **Adjust the sound quality and balance**
 - Adjust low pitch sounds with the BASS knob.
 - Adjust high pitch sounds with the TREBLE knob.
 - Adjust the right/left balance with the BALANCE knob.

Sound etiquette

Listen to music at an appropriate volume that will not disturb others. Especially in the quiet of night, even quiet sounds can carry easily. To prevent a disturbance, close windows and use headphones. Take care to think of others' comfort.

Caution:

When CD DIRECT is on, adjusting BASS or TREBLE has no effect.

CD DIRECT

The playback signal from the connected CD player is output directly, without passing through the BASS, TREBLE, BALANCE control circuits, or PRESENCE circuit, to provide higher sound quality.

1. **Press CD DIRECT**
 - The indicator lights.

2. **Adjust the volume**
 - Adjust the volume using the VOLUME knob.

Caution:

- When CD DIRECT is on, adjusting BASS, TREBLE or BALANCE has no effect.
- Turning on CD DIRECT when PRESENCE is on turns off PRESENCE.
- If you want to listen to an MD, set the CD DIRECT button to OFF. Sound does not come out when the button is set to ON.

PRESENCE

By improving the realism of low sounds, and clarifying the outline of midrange sounds, playback is easily heard at low volume or when using small speakers.

1. **Press PRESENCE**
 - The indicator lights

Caution:

- Turning on PRESENCE when CD DIRECT is on turns off CD DIRECT.

COMPULINK Remote Control System

This section describes operation of the amplifier when the separately sold JVC audio components are synchro connected (COMPULINK-3).

COMPULINK basics

The following section describes the COMPULINK Remote Control System. In these instructions we refer to the COMPULINK Remote Control System as 'COMPULINK' for convenience sake.

Buying a separate MD recorder, CD player, amplifier or other components to enjoy just the combination you want is a good way to get high-quality sound. However, since each component has to be operated individually, this method has the drawback of difficult operation. JVC's COMPULINK Remote Control System meets the demand for a system made up of single components and has the ease of operation of a single unit.

Products that are compatible with COMPULINK have terminals marked either COMPULINK-1, COMPULINK-2, or COMPULINK-3 (referred to collectively as COMPULINK terminals). When components are linked by the COMPULINK terminals, simple operations like those of a single unit component system can be achieved.

About the COMPULINK version

- There are three versions of COMPULINK currently on sale by JVC. These are COMPULINK-1, COMPULINK-2, and COMPULINK-3. COMPULINK-3 is the newest version, with more functions than COMPULINK-1 and COMPULINK-2.

- Distinguishing versions

The version is displayed at the terminals of the components.

Caution:

COMPULINK-3 components may be connected to other version components, but in this case the newest functions may not work.

COMPULINK 3 functions

The following is a brief overview of COMPULINK-3 functions.

One press play

This function lets you listen without operating the amplifier, just by putting the source component (the component which plays the sound source such as the CD player or MD recorder) into play mode.

Synchro recording

Allows recording to start automatically when the source starts playing.

Timer operation

Recording or playback can be made to start at a preset time using the timer function built into the tuner.

Total operation by remote control

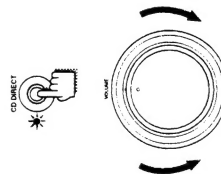
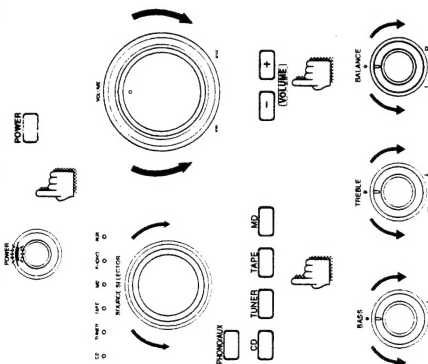
All source components, such as the CD player and cassette deck, can be operated by one amplifier remote control. See the amplifier's instructions for how to use the remote control.

Minidisc recorder automatic input switching

When the setting of the input selector in the minidisc is set to digital input, digital input is done only when the amplifier's source selector is set to CD. When it is set to other sources, analog input is done. This saves the labor of switching every time.



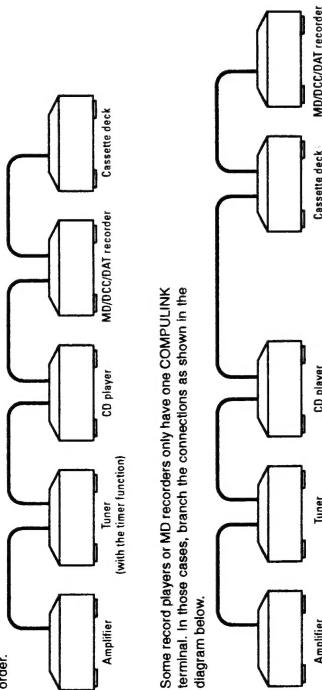
COMPULINK
Remote III
Control System



Connections

Connection example

This is the basic connection example of the JVC audio components. Connection is done so that all functions are bridged. There is no set order.



Some record players or MD recorders only have one COMPU LINK terminal. In those cases, branch the connections as shown in the diagram below.

Connect the COMPU LINK terminals of each component to each other using the connection cable with mono mini plugs.

- When there is more than one COMPU LINK terminal, any terminal can be used.
- Plug the power plugs of each component into the UNSWITCHED outlet or a wall outlet. If components are plugged into the SWITCHED outlet, COMPU LINK functions will not work normally.
- If there are no input/output terminals for an MD recorder or DCC deck on the amplifier, use the DAT terminals. If other terminals are used, COMPU LINK will not work normally.

Cautions:

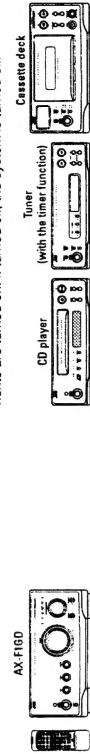
- Among MD recorders, DCC decks and DAT decks, two different types of components cannot be connected in the COMPU LINK system at the same time. Select the more commonly used component to connect.
- If the amplifier is not connected, only the 'synchro recording' function will work.
- The 'timer operation' function will only work if a tuner with a timer function is connected.

COMPU LINK-3 functions

See pages 8, 9 for information on making synchro connections.

1. System power on/STANDBY

When the power of the AX-F1GD or its remote control is turned on/off,



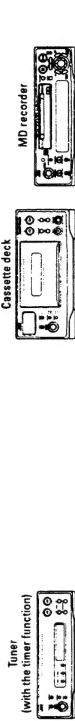
2. Synchro recording of CDs

When REC PAUSE is pressed on the cassette deck or MD recorder (recording standby mode),



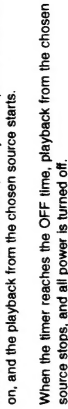
3. Timer recording

When the REC TIMER on the tuner is set (to record a radio broadcast),



4. Timer play

When the DAILY TIMER on the tuner is set,



5. Minidisc recorder automatic input switching

To have the minidisc recorder input switched automatically: With the automatic input switching function, you can save the trouble of first having to change the input selector setting each time you record to a minidisc.

Set the minidisc recorder's input selector for digital input (DIGITAL IN)

Input will be digital only when the amplifier's source selector is set to CD, and will be analog for all other settings. When the minidisc recorder's input selector is set for analog input (ANALOG IN), all input will be analog.

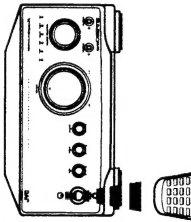
Caution:

For information about coordinated operation by the COMPU LINK-3 remote control system, see the instructions of the separately sold JVC audio components.

Remote control

When the COMFUNK-3 remote control system is missing, the only functions which can be done with the amplifier's remote control are POWER, SOURCE SELECTOR, VOLUME and FADE MUTING.

Point the end of the remote control at the amplifier's remote sensor and press the buttons correctly. If the remote control is used from an angle, the signal may not register, so try to have it contact straight on, as much as possible. Make sure there are no obstructions between the amplifier and remote control.



RDS (Radio Data System)

These buttons are for use of a tuner with RDS functions.

PTY SEARCH : Used for searching for a program by selling a PTY code.

PTY SELECT : Select a PTY code.

DISPLAY MODE : Changes the display indications from the time to the station information.

POWER

Turns on the unit or puts it in STANDBY mode.

TUNER 10KEY

After selecting the tuner, the 1 to 10, +10 and BAND keys can be used to operate the tuner.

1 to 10, +10 : Used for selecting a preset channel

BAND : Used to choose AM or FM

SOURCE SELECTOR

Used to choose the source you want to listen to.

The indicator for the source chosen lights on the front panel.

CD : For listening to the CD player.

TUNER : For listening to the radio.

TAPE : For listening to the cassette deck.

MD : For listening to an MD.

PHONO/AUX : For listening to the record player or an auxiliary component connected to the AUX terminal.

CD/MD : Opens or closes the CD tray. With the SHIFT button pressed, ejects or loads an MD.

VOLUME

Adjusts the volume of the speakers or headphones.

- : Lowers the volume.

+ : Raises the volume.

FADE MUTING

Turns off the volume.

One press play (with the AX-F1GD in STANDBY)

- When TUNER is pressed, the power of the amplifier and the tuner turns on and receive the station last tuned in.
- When TAPE or the cassette deck's play button (▶) is pressed, the power of the amplifier and the cassette deck turns on and a tape is played.
- When CD or the CD player's play (▶) button is pressed, the power of the amplifier and the CD player turns on and playback starts.
- When PHONO/AUX is pressed, the amplifier is turned on.
- When MD or the MD recorder play button (▶) is pressed, the power of the amplifier and MD recorder turns on and playback starts.

Troubleshooting

- If you are having a problem with your AX-F1GD, check this list for a possible solution before calling for service.
- If you cannot solve the problem from the hints given here, or the Unit has been physically damaged, call a qualified person, such as your dealer, for service.

SYMPTOM	POSSIBLE CAUSE	ACTION
There is no sound	<ul style="list-style-type: none">• Connections are incorrect.• The AX-F1GD is selecting another component.	<ul style="list-style-type: none">• Connect the cords correctly.• Set amplifier's SOURCE SELECTOR to the correct setting.
Sound only comes out of one speaker	<ul style="list-style-type: none">• The BALANCE knob is set to right or left.	<ul style="list-style-type: none">• Adjust the BALANCE knob.
BASS, TREBLE and BALANCE knobs don't work	<ul style="list-style-type: none">• CD DIRECT is set to ON.	<ul style="list-style-type: none">• Turn off the CD DIRECT.
The remote control doesn't work	<ul style="list-style-type: none">• There are obstacles between the remote control and the remote sensor.• Dry batteries have run out.	<ul style="list-style-type: none">• Remove obstacles between the remote control and amplifier.• Replace old batteries with new ones.

PROGRAM play of a CD by remote control

1. Press CD
Select the CD player as an input source.

Caution:
PROGRAM play cannot be set while playing a CD. So stop playback of a CD before setting the program.

2. Press PROGRAM/BAND
The PROGRAM indicator on the CD player lights.
3. Specify a track number with the CD/TUNER 10 KEY buttons from 1 to 10 and +10
For the 5th track on the CD, press "5".
For the 20th track, press "+10", and then "10".
For the 25th track, press "+10" twice, and then "5".

PROGRAM play can be done for up to 32 tracks. Each time a track is specified, the programmed track numbers and number of programmed tracks are displayed.

4. Press the play ► button
PROGRAM play starts.

To confirm a program

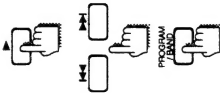
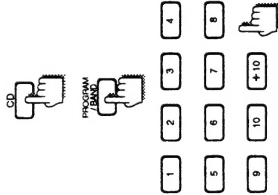
- You can check the tracks programmed by pressing ◀◀ or ▶▶ when the CD is not playing.

To cancel a program

- Press PROGRAM/BAND when the CD is not playing.
- The CD player's PROGRAM indicator goes out, and the program is completely canceled.

Caution:

The program is not canceled even if stop ■ is pressed.

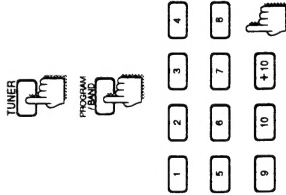


Setting a preset channel by remote control

1. Press TUNER
Select the TUNER as an input source.

2. Press PROGRAM/BAND
Used to choose AM (MW/LW) or FM

3. Specify a preset channel with the CD/TUNER 10 KEY buttons.
For the 5th channel on the AM (MW/LW) or FM, press "5".
For the 20th channel, press "+10", and then "10".
For the 25th channel, press "+10" twice, and then "5".



Specifications

Output Power (IEC 268-3/ DIN): (JVC Audio Analysis System):	50 watts per channel into 4 ohms at 1 kHz with no more than 0.7% total harmonic distortion. 40 watts per channel, min. RMS, both channels driven into 6 ohms from 20 Hz to 20 kHz, with no more than 0.03% total harmonic distortion. 40 watts per channel, min. RMS, both channels driven into 6 ohms at 1 kHz with no more than 0.01% total harmonic distortion.
Total harmonic distortion CD DIRECT in, SPEAKERS out: CD, TUNER, AUX, TAPE, MD in, SPEAKERS out: PHONO in, SPEAKERS out:	0.003% at 40 watts (at 1 kHz, 6 ohms loaded) 0.03% at 40 watts (from 20 Hz to 20 kHz, 6 ohms loaded) 0.01% at 40 watts (at 1 kHz, 6 ohms loaded) 0.03% at 40 watts (from 20 Hz to 20 kHz, 6 ohms loaded) 0.05% at 40 watts (from 20 Hz to 20 kHz, 6 ohms loaded - 17 dB volume)
Damping Factor:	80 (1 kHz, 8 ohms)
Power bandwidth:	20 Hz to 20 kHz (HF, both channels driven into 6 ohms, with no more than 0.05% total harmonic distortion)
Signal-to-noise ratio (66 IHF/ DIN) PHONO (MM): CD, TUNER, AUX, TAPE, MD: CD DIRECT:	73 dB/ 72 dB 90 dB/ 75 dB 105 dB/ 75 dB
Input Sensitivity/ Impedance (1 kHz) PHONO (MM): CD, TUNER, AUX, TAPE, MD:	2.5 mV/ 47 k ohms 200 mV/ 47 k ohms
Output Level/ Impedance (1 kHz) MD:	200 mV/ 740 ohms
Tone control range BASS: TREBLE:	±8 dB at 100 Hz ±8 dB at 10 kHz
Frequency Response (6 ohms): PHONO overload capacity (PHONO in, TAPE, MD REC out): RIAA phono equalization:	10 Hz to 70 kHz (+0 dB, -3 dB) 100 mV (with no more than 0.1% total harmonic distortion) ±0.5 dB (20 Hz to 20 kHz)
Power Requirement:	AC 230 volts ¹⁾ , 50 Hz
Power Consumption:	120 watts 8.5 watts (STANDBY)
Dimensions (W x H x D):	245 x 120 x 309.5 mm 9-11/16 x 4-3/4 x 12-3/16 inches
Mass:	4.9 kg (10.8 lbs)

Design and specifications subject to change without notice.

Description of ICs

■ MN171202J6L (IC501) : SYSTEM CONTROLLER

1. Terminal Layout

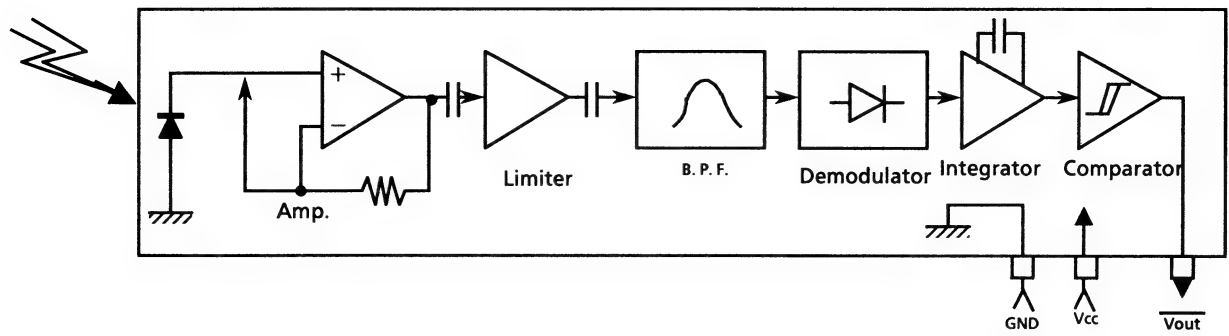
VDD	1	64	OSC IN
CD IND	2	63	OSC OUT
TUNER IND	3	62	GND
TAPE IND	4	61	
MD IND	5	60	
PHONO IND	6	59	
AUX IND	7	58	POWER ON
POWER ON IND	8	57	SPK-RELAY
VOLUME IND	9	56	MUTE
DIRECT IND	10	55	DIRECT ON/OFF
SOUND IND	11	54	SOUND ON/OFF
	12	53	VOL. DOWN
	13	52	VOL. UP
	14	51	H.P.IN
	15	50	
	16	49	
	17	48	
GND	18	47	
	19	46	PROTECT-IN
	20	45	INH
	21	44	RM-IN
	22	43	RESET
	23	42	DATA
	24	41	STB
	25	40	SCLK
	26	39	
DCS-IN	27	38	SOURCE SEL-2
DCS-OUT	28	37	SOURCE SEL-1
	29	36	
	30	35	
DIRECT KEY IN	31	34	
POWER KEY IN	32	33	SOUND KEY IN

2. Functions

Pin No.	Symbol	I/O	Function	Pin No.	Symbol	I/O	Function
1	VDD	--	Power supply	33	SOUND KEY IN	I	SOUND key input
2	CD IND	O	CD indicator control	34		--	Connect to GND
3	TUNER IND	O	TUNER indicator control	35		--	Connect to GND
4	TAPE IND	O	TAPE indicator control	36		--	Connect to GND
5	MD IND	O	MD indicator control	37	SOURCE SEL-1	I	Source select control
6	PHONO IND	O	PHONO indicator control	38	SOURCE SEL-2	I	Source select control
7	AUX IND	O	AUX indicator control	39		--	Connect to GND
8	POWER ON IND	O	POWER ON indicator control	40	SCLK	O	Clock output for IC201
9	VOLUME IND	O	VOLUME indicator control	41	STB	O	Strobe signal for IC201
10	DIRECT IND	O	CD DIRECT indicator control	42	DATA	O	Data for IC201
11	SOUND IND	O	SOUND indicator control	43	RESET	I	Reset signal input
12		--	Pull up	44	RM-IN	I	Remote control signal input
13		--	Pull up	45	INH	I	Inhibit signal input
14		--	Pull up	46	PROTECT-IN	I	Detection for protector
15		--	Pull up	47		--	Connect to GND
16		--	Pull up	48		--	Connect to GND
17		--	Pull up	49		--	Connect to GND
18	GND	--	GND	50		--	Connect to GND
19		--	Pull up	51	H.P.IN	I	Headphone in signal input
20		--	Pull up	52	VOL. UP	O	Volume control signal
21		--	Pull up	53	VOL. DOWN	O	Volume control signal
22		--	Pull up	54	SOUND ON/OFF	O	Presence control signal
23		--	Pull up	55	DIRECT ON/OFF	O	CD direct control signal
24		--	Pull up	56	MUTE	O	Source mute control signal
25		--	Pull up	57	SPK-RELAY	O	Speaker relay control signal
26		--	Pull up	58	POWER ON	O	Regulator control signal
27	DCS-IN	I	Compulink signal input	59		--	Connect to GND
28	DCS-OUT	O	Compulink signal output	60		--	Connect to GND
29		--	Pull up	61		--	Not used
30		--	Pull up	62	GND	--	GND
31	DIRECT KEY IN	I	CD DIRECT key input	63	OSC OUT	O	Clock oscillator output
32	POWER KEY IN	I	POWER key input	64	OSC IN	I	Clock oscillator input

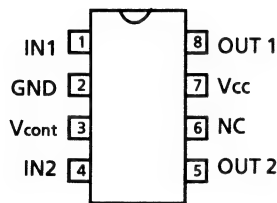
AX-F1GD

■ GP1U501X (IC502) : Receiver for remote controller

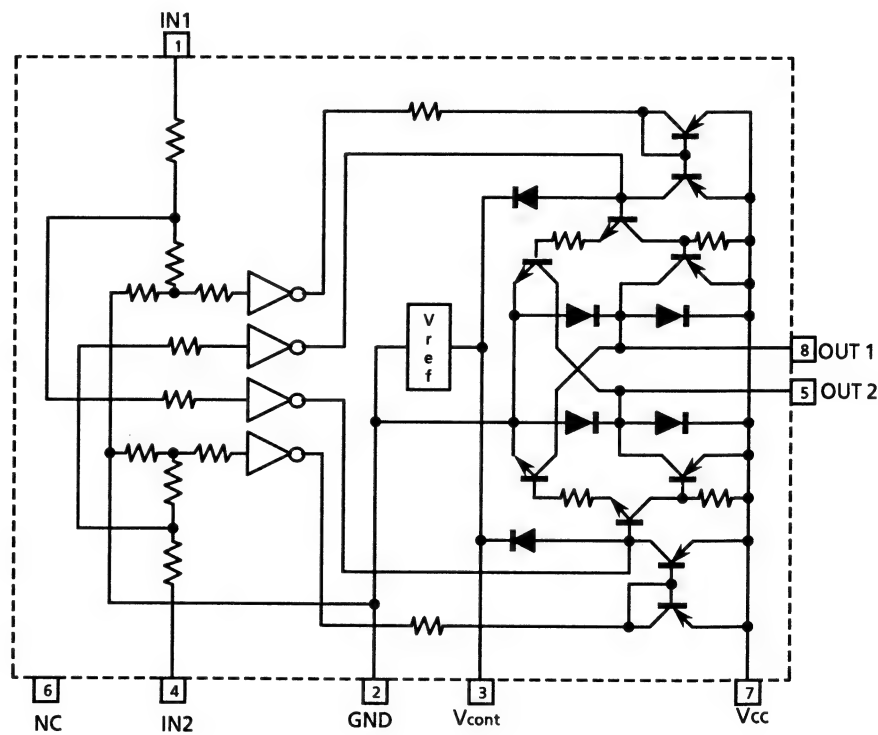


■ LB1639-CV (IC351) : Motor Driver

1. Terminal Layout



2. Block Diagram

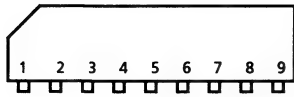


3. Functions

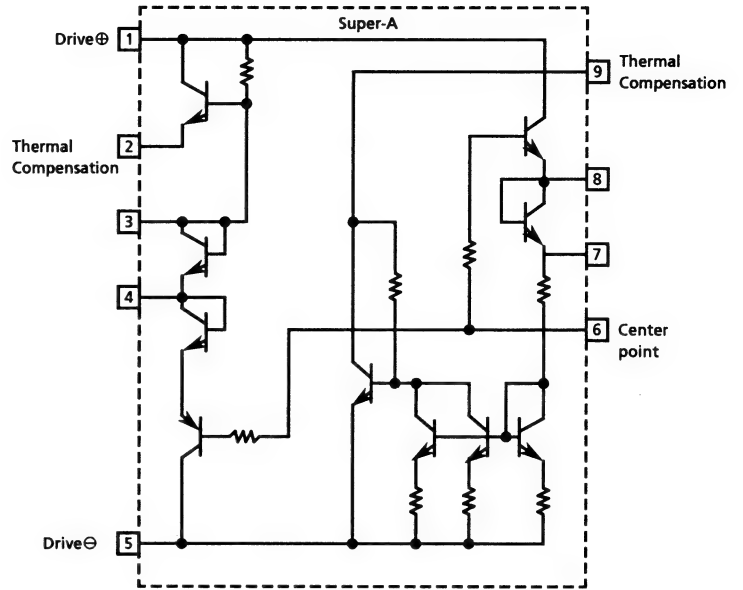
IN 1	IN 2	OUT 1	OUT 2	MOTOR
H	L	H	L	CLOCKWISE
L	H	L	H	COUNTER-CLOCKWISE
H	H	OFF	OFF	WAITING
L	L	OFF	OFF	WAITING

■ VC5022-2 (IC751) : SUPER A

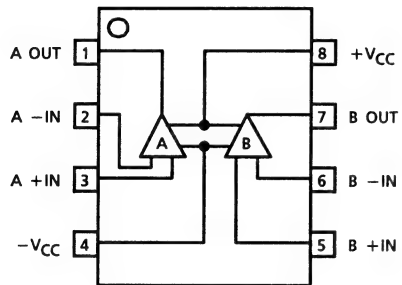
1. Terminal Layout



2. Block Diagram



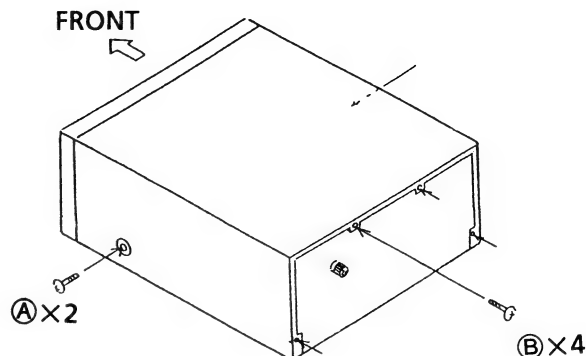
■ VC4580DD (IC101,231,361,301) : Dual OP amp.
 NJM4558 (IC362,363) : Dual OP amp.



Disassembly Procedures

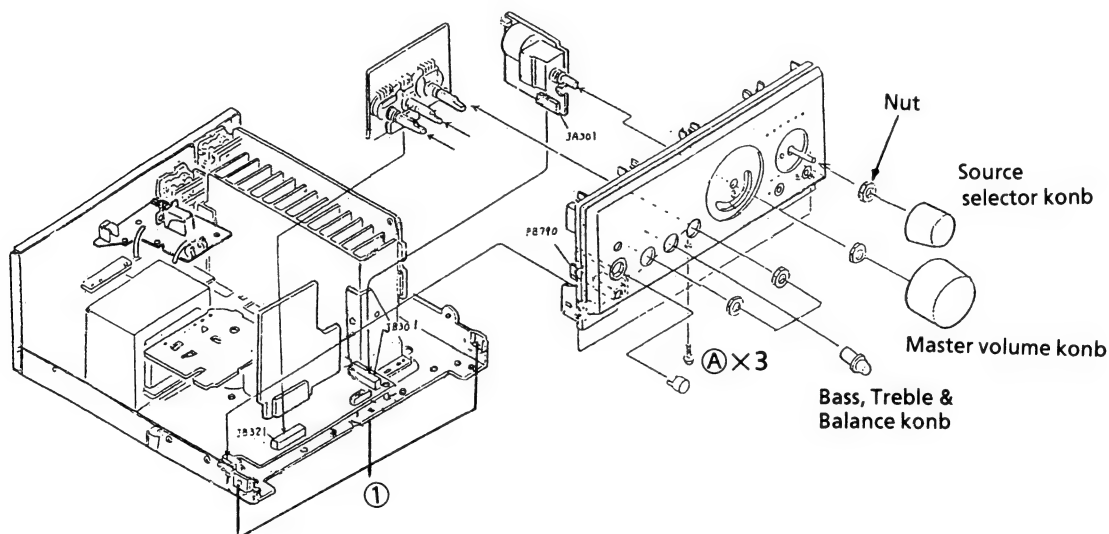
(1) Removing the top cover

1. Remove 2 screws ① fastening both sides of top cover, and 4 screws ② fastening the rear side.
2. Remove the top cover.



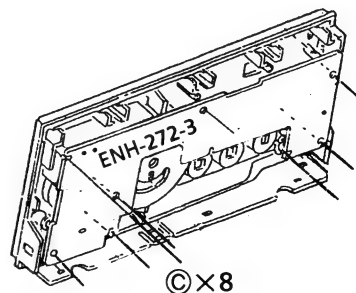
(2) Removing the Front Panel Assembly

1. Remove the top cover.
2. Disconnect the connector PA350.
3. Pull out the Master volume knob, Treble knob, Bass knob and Balance knob.
4. Remove the nut fastening the Master volume, Bass and Balance.
5. Disconnect the connectors (PA790, P202, P203, BC500)
6. Remove 3 screws ③ and 3 hook ④ fastening bottom of the front panel assembly.



(3) Removing the Control PCB (ENH-272-3)

1. Remove the top cover.
2. Remove the front panel assembly.
3. Pull out the source selector knob and remove the nut fastening the source selector.
4. Remove 8 screws ④ fastening the control PCB to remove it.



① .. SD SG3008N

② ... GB SG3008CC

③ ... SD SF2608Z

(4) Removing the Input & Selector PCB (ENH-272-2)

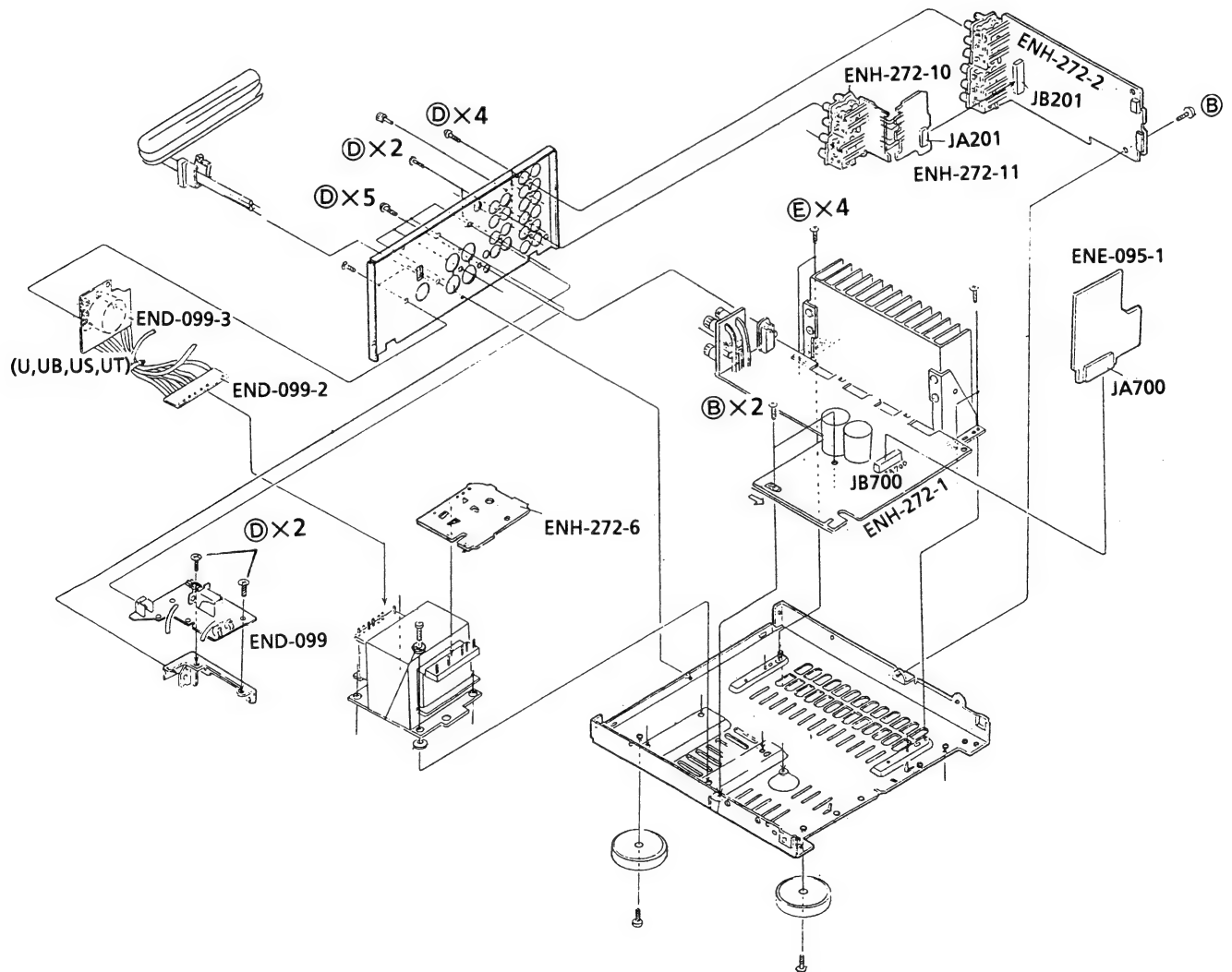
1. Remove the top cover.
2. Disconnect the connectors P202 and P203.
3. Remove 7 screws ③ and ④ fastening the input & Selector PCB to remove it.

(5) Removing the Power supply PCB (END-099)

1. Remove the top cover.
2. Remove 3 screws ④ fastening the power supply PCB to remove it.

(6) Removing the Main PCB (ENH-272-1)

1. Remove the top cover.
2. Remove the front panel assembly.
3. Remove the volume PCB, balance PCB, power supply PCB and pre-driver PCB.
4. Remove 2 screws ③ fastening the main PCB.
5. Remove 4 screws ⑤ fastening the heat sink.
6. Remove 2 screws ④.
7. Remove the main PCB with heat sink.



③ .. GBSG3008CC

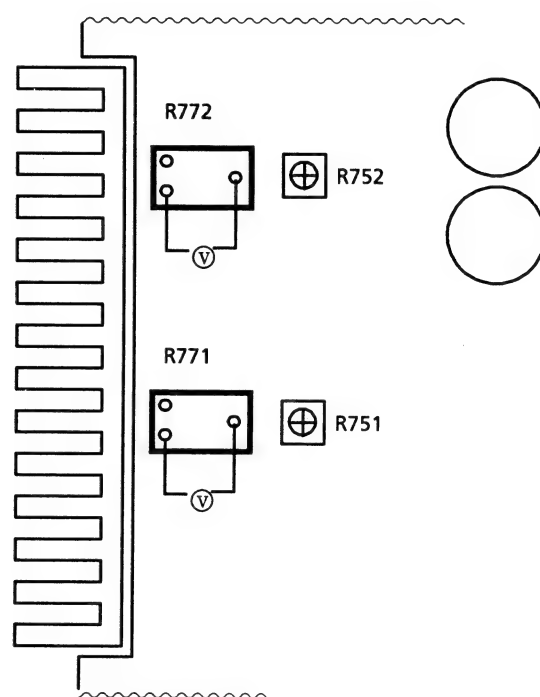
④ ... E73273-003

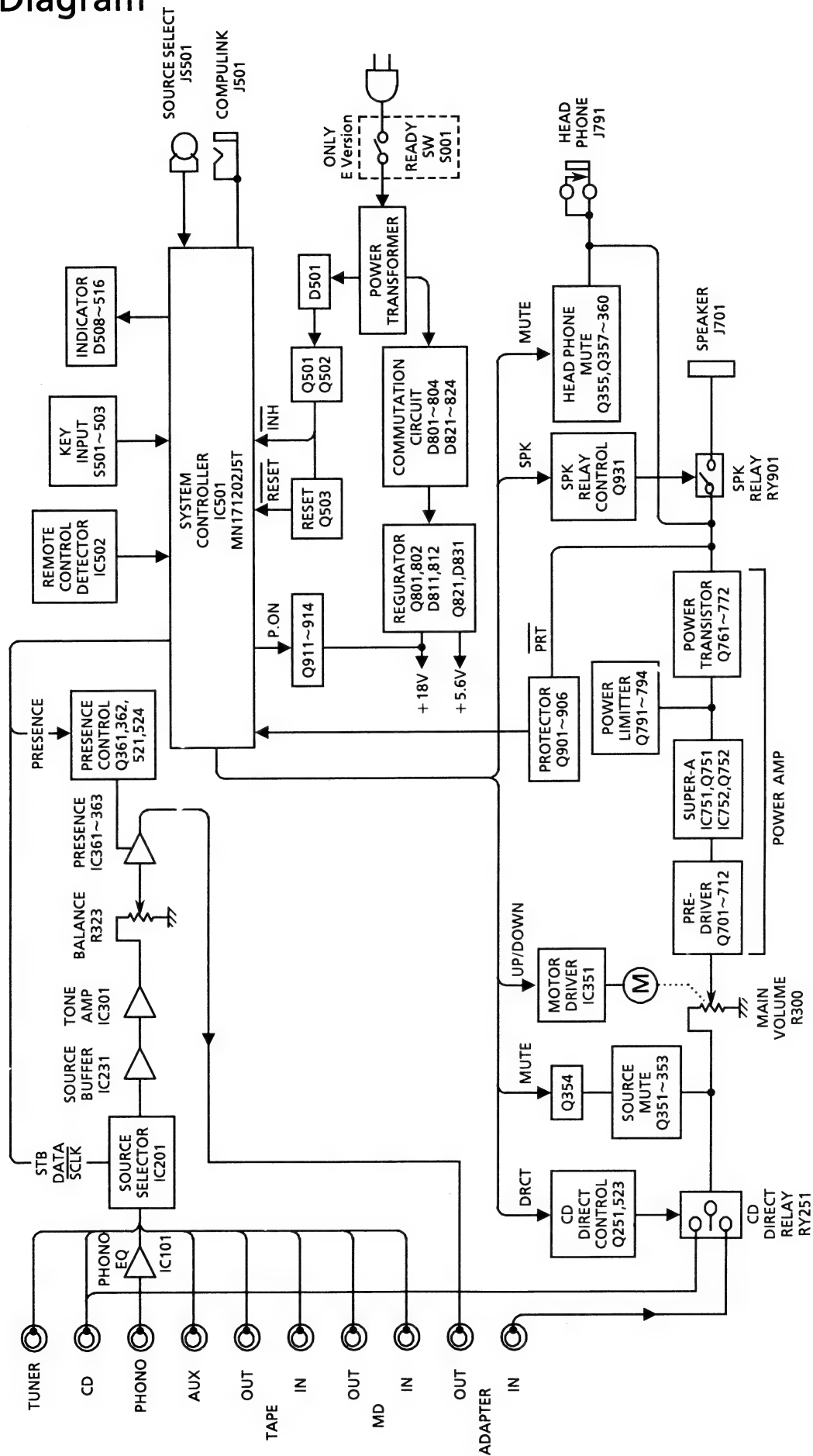
⑤ ... E74266-002

ADJUSTMENT PROCEDURES

■ Idling Current

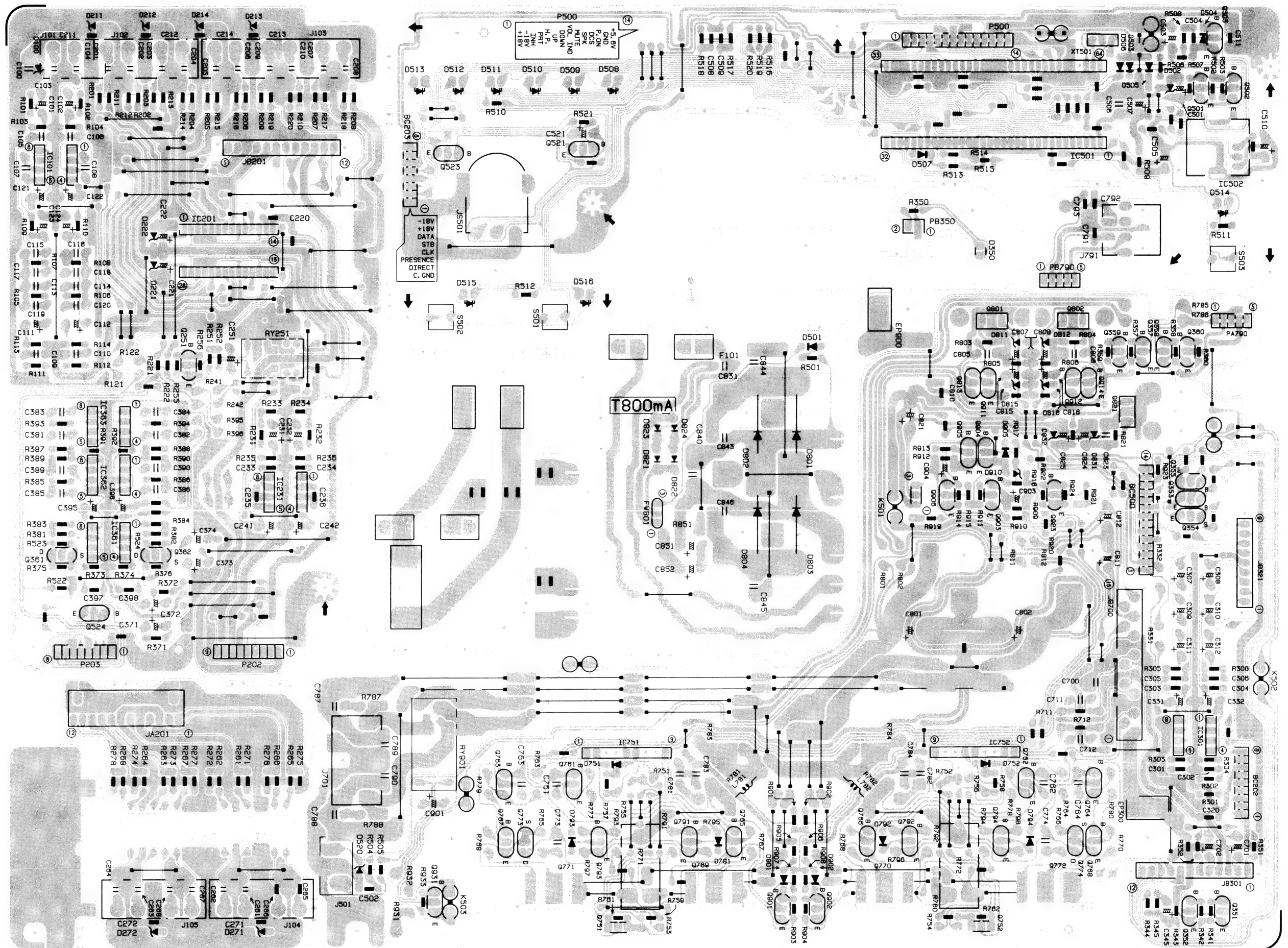
- (1) Set the volume control to minimum during this adjustment.
- (2) Turn R751 and R752 fully counterclockwise before the power is switch on.
- (3) Always start from cold, and allow 5 minutes to warm up before adjustment.
If the heatsink is already warm from previous use the correct adjustment can not be made.
- (4) Connect a DC voltmeter to R771 resistor's leads for left channel, or to R772 for right channel.
- (5) Adjust R751 for left channel, or R752 for right channel, so that the DC voltmeter becomes 4.5 mV ~ 15mV.



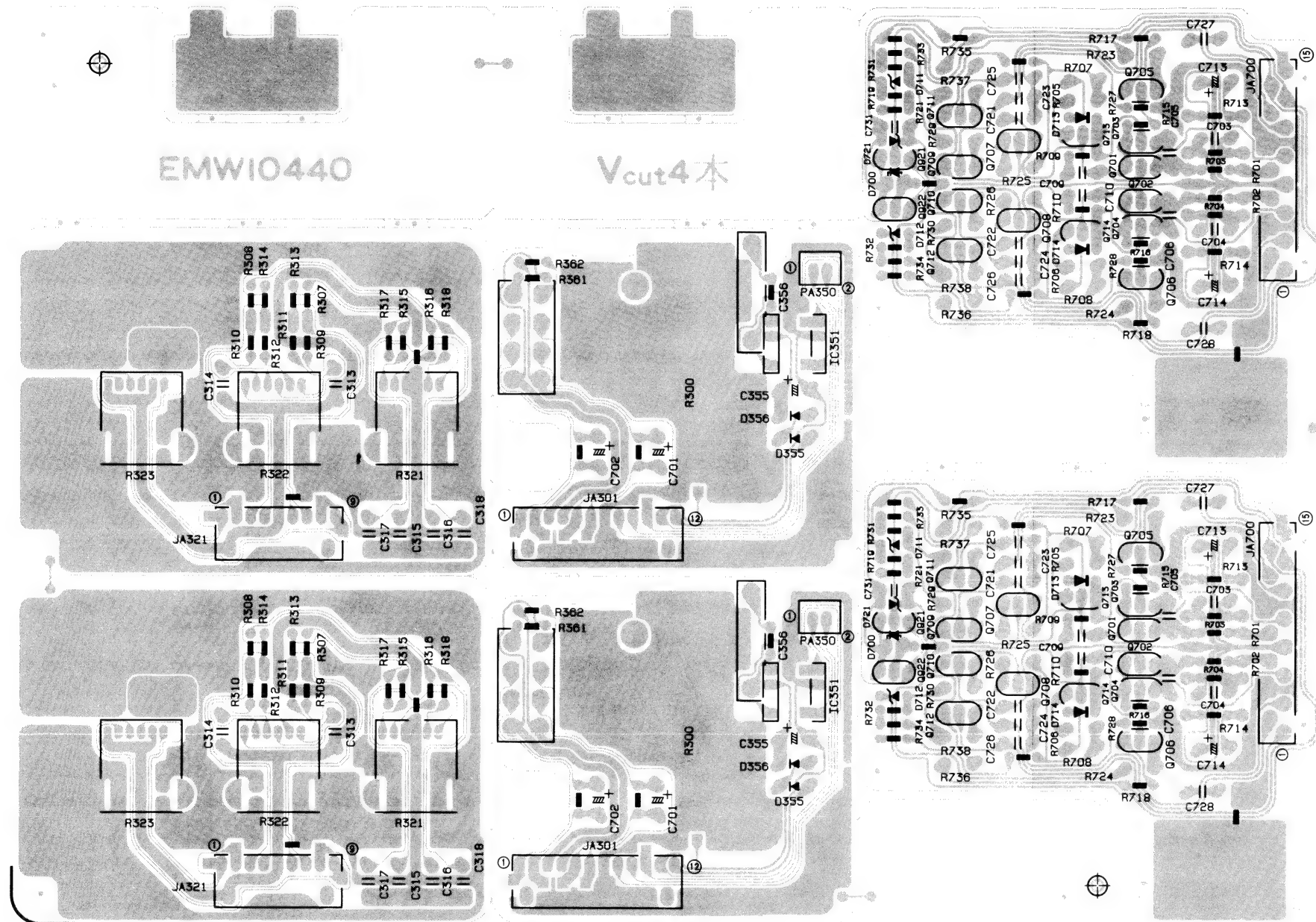


Printed Circuit Boards

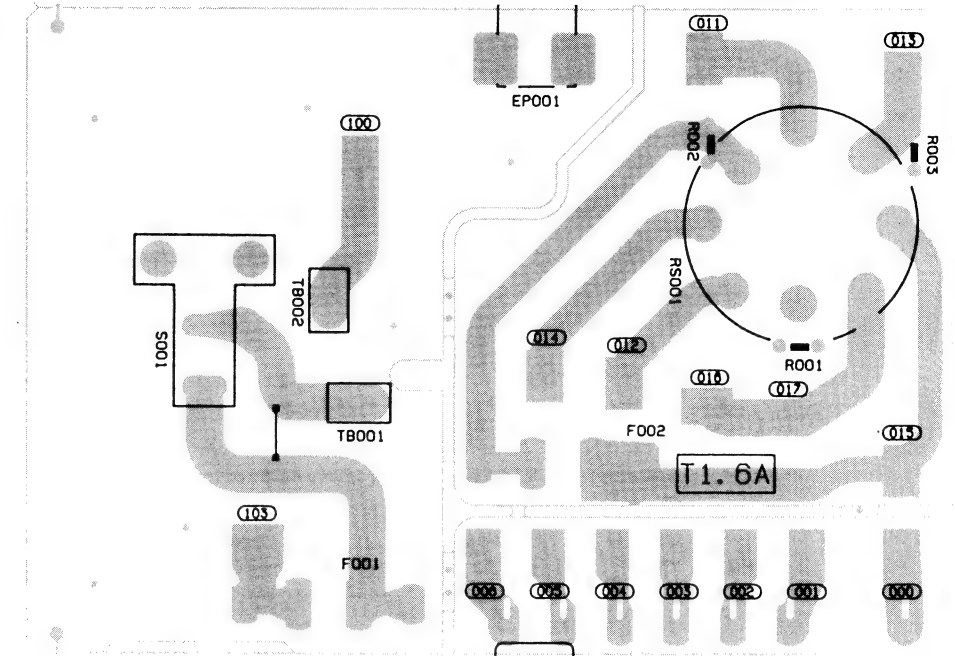
■ Main P. C. Board(ENH-272)



■ Pre Driver & Volume P. C. Board(ENE-095)

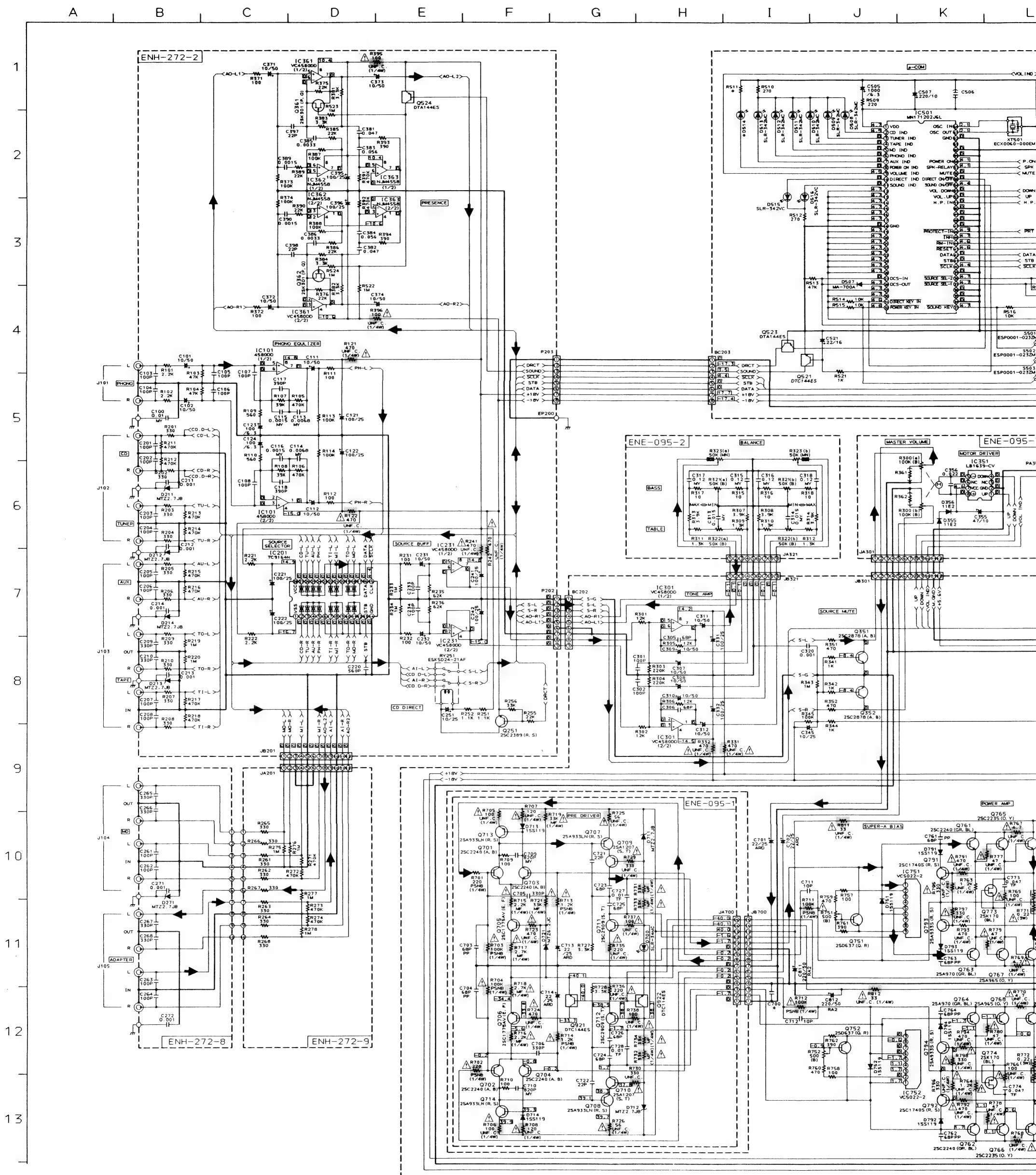


■ Power Supply P. C. Board(END-099)

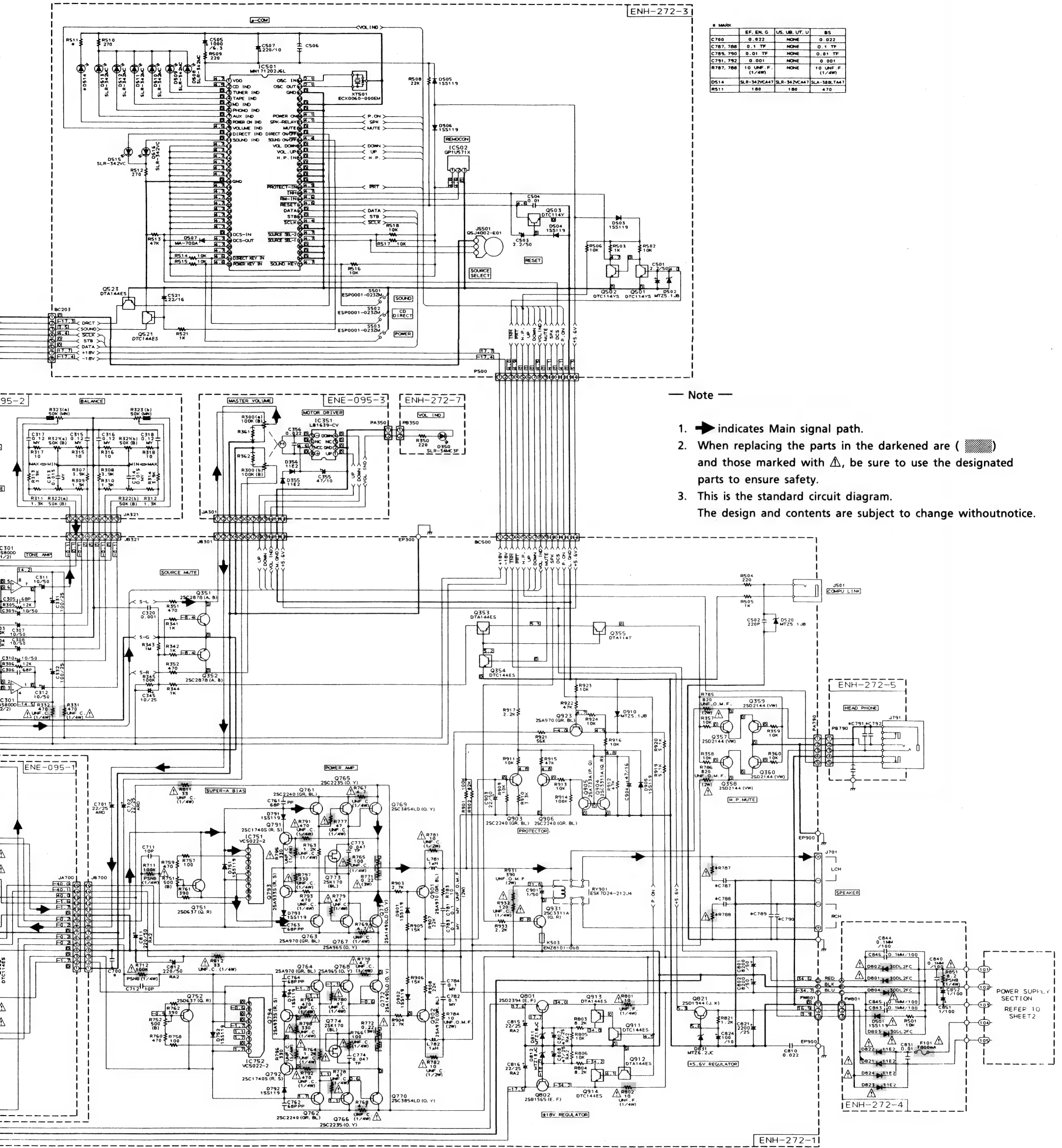


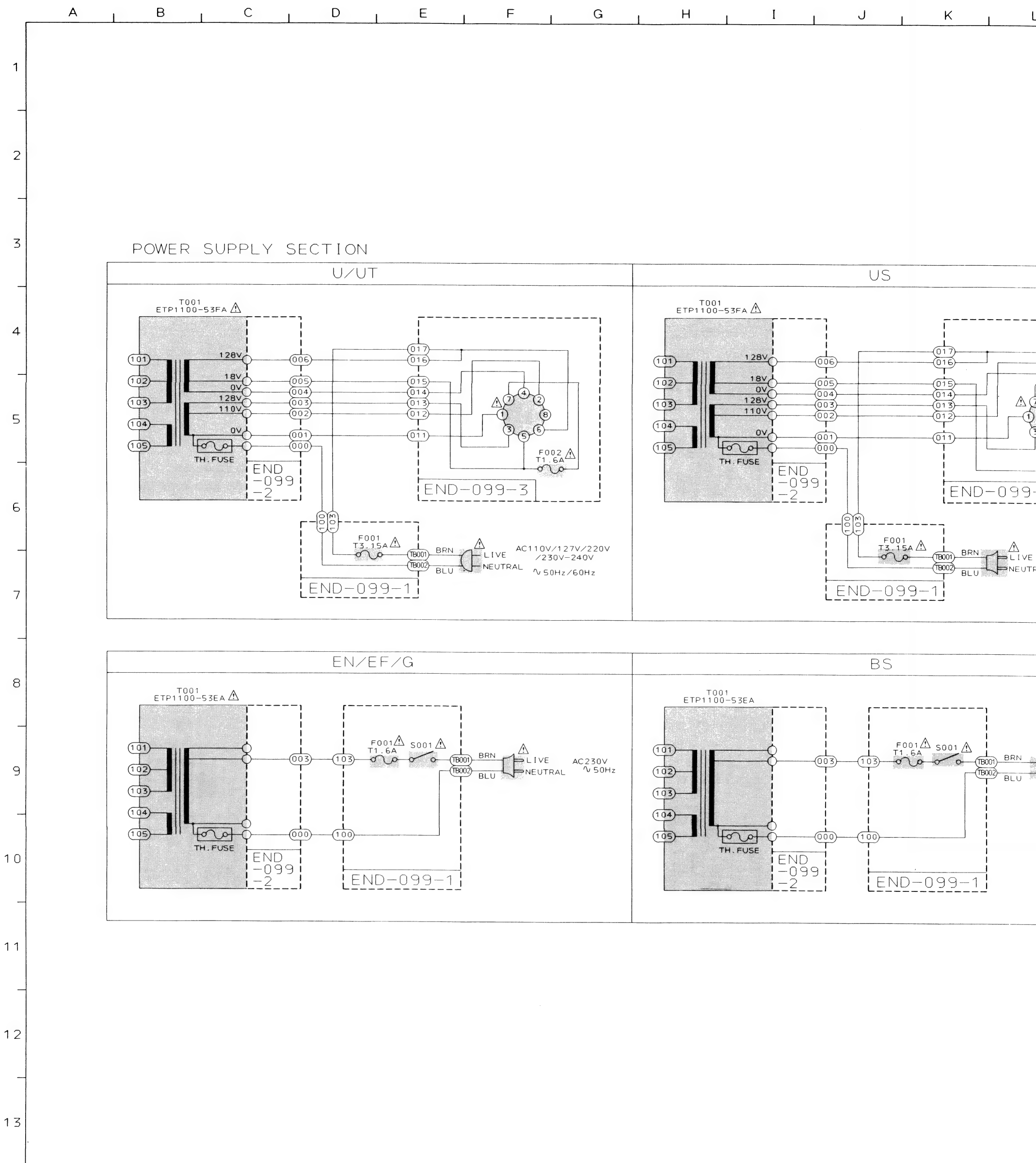
Schematic Diagrams

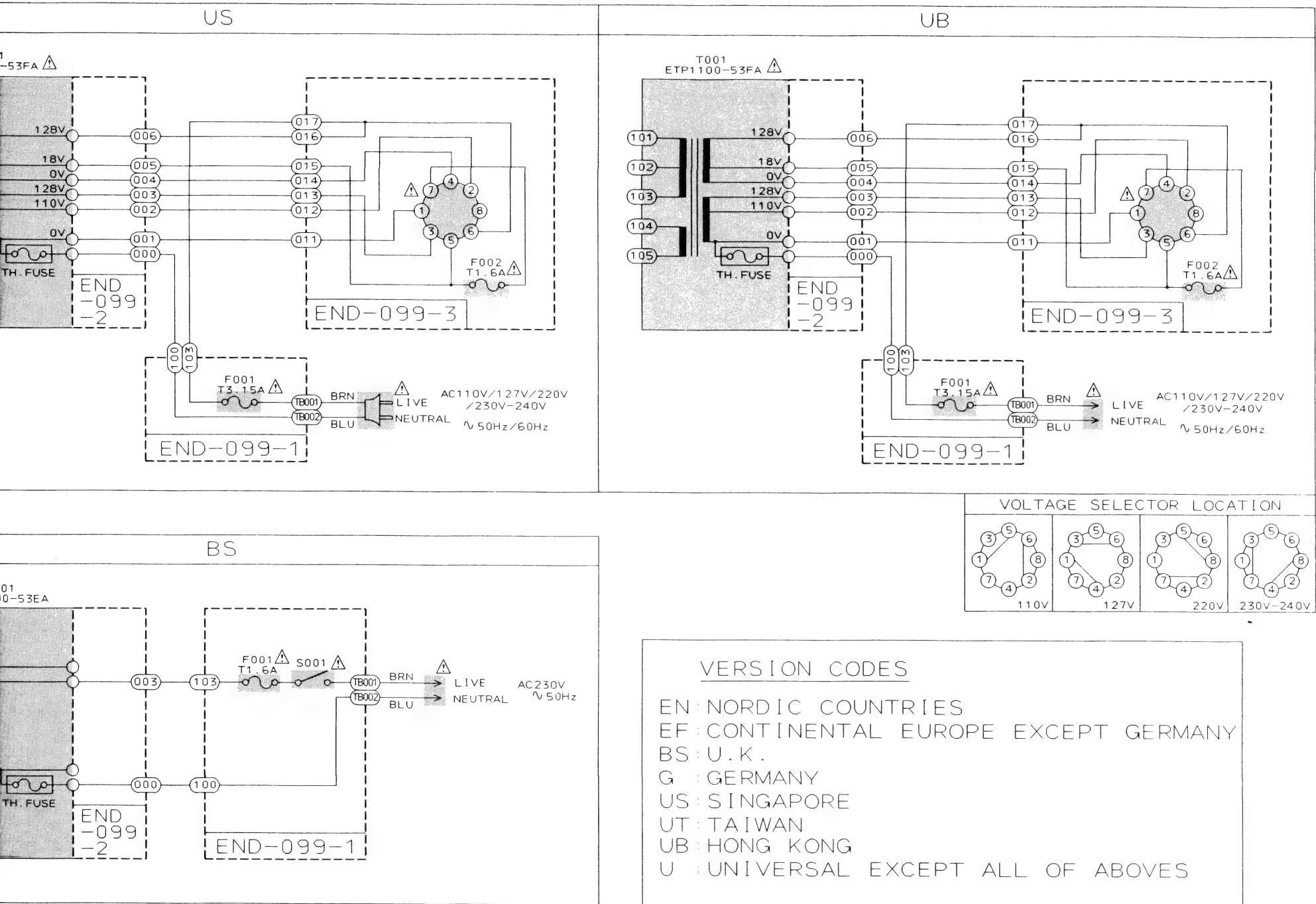
(1) Audio Section



H I J K L M N O P Q R S







PARTS LIST

Note : All printed circuit board assemblies are not available as service parts.

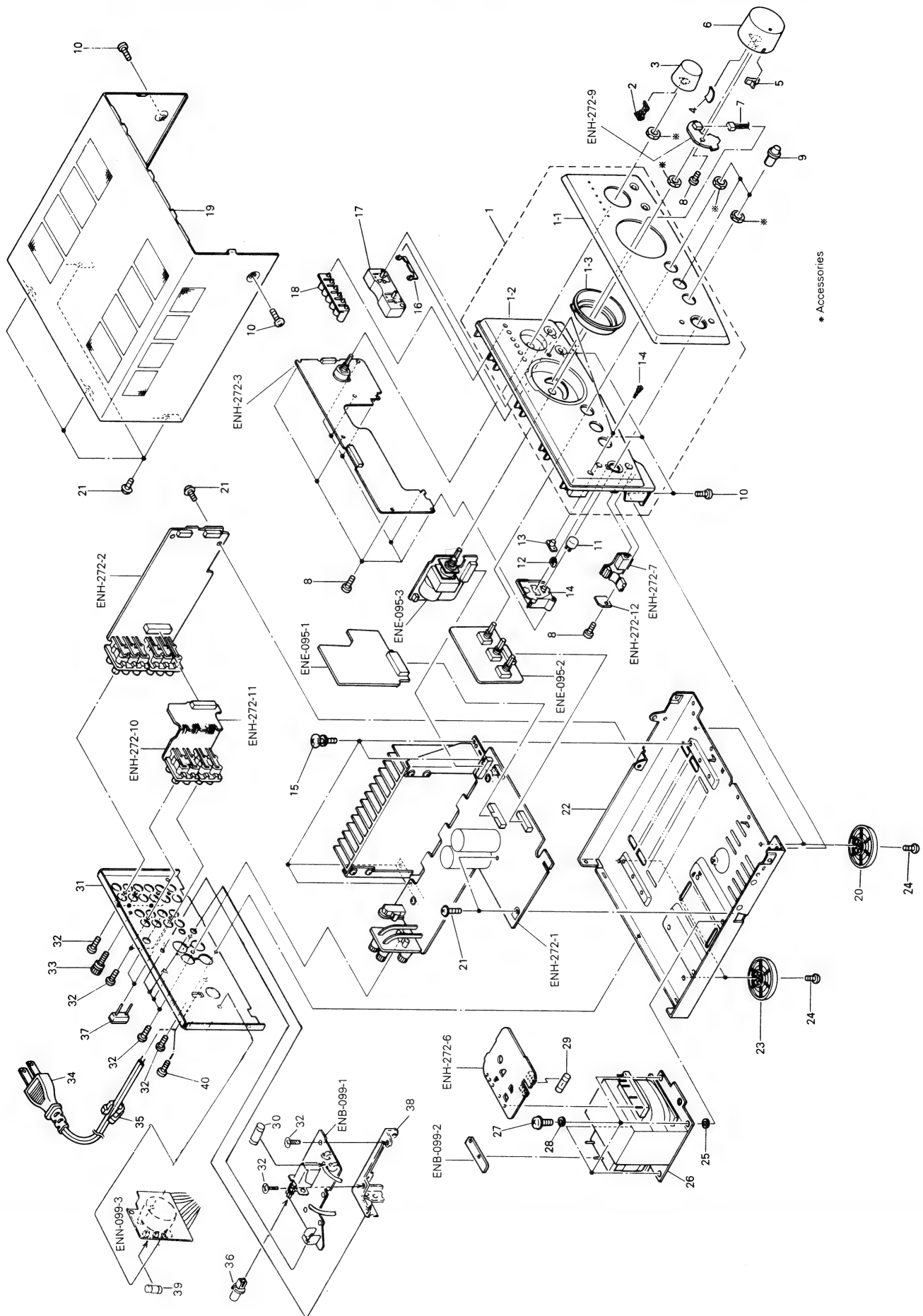
Contents

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Packing Materials and Part Numbers	2-12

General Exploded View and Parts List

Symbol No.

M	1	M	M
---	---	---	---



■ Parts List

Symbol No.

M	1	M	M
---	---	---	---

⚠	Item	Part Number	Part Name	Q'ty	Description	Area
	1	EFP-AXF1GDBS(S)	FRONT PANEL ASS'Y	1		BS
		EFP-AXF1GDE(S)	FRONT PANEL ASS'Y	1		Except BS
	1-1	E102861-002	FRONT PANEL	1		Except BS
		E102861-003	FRONT PANEL	1		BS
	1-2	E102863-002ST	FRONT BASE	1		
	1-3	E308998-002	KNOB RING	1		
	1-4	E408132-001	SPRING	2		
	2	E408159-001	SPACER	1	SOURCE	
	3	E308969-002	KNOB	1	SOURCE	
	4	E408294-001	SPACER	1	VOLUME	
	5	E408129-001ST	INDICATOR LENS	1		
	6	E308968-002	M.VOL KNOB	1		
	7	EWS142-002B	SOCKET WIRE ASSY	1	AW990	
	8	SDSF2608Z	SCREW	10		
	9	E408127-004	KNOB	3	BALANCE, ETC	
	10	SDSG3008N	TAPPING SCREW	5		
	11	E408130-002	CAP	1		
	12	E408128-001ST	POWER INDICATOR	1		Except BS
		E408128-002ST	POWER INDICATOR	1		BS
	13	E408131-001	REMOCON PLATE	1		
	14	E308967-002	PUSH BUTTON	1		
	15	E74266-002	SPECIAL SCREW	4		
	16	E408126-001ST	INDICATOR LENS	1		
	17	E308966-002	PUSH BUTTON	1		
	18	E308965-001ST	INDICATOR LENS	1		
	19	E208174-005(S)	METAL COVER	1		
	20	E75281-008	FOOT	2	FRONT	
	21	GBSG3008CC	TAPPING SCREW	7		
	22	E102864-005	CHASSIS BASE	1		
	23	E75281-007	FOOT	2	REAR	
	24	SBST3008Z	TAPPING SCREW	4		
⚠	25	E407406-002	SPACER	4		
⚠	26	ETP1100-53EA	POWER TRANSFORMER	1	T001	EF, EN, G, BS
⚠		ETP1100-53FA	POWER TRANSFORMER	1	T001	U, UB, US, UT
	27	E61661-003	SPECIAL SCREW	4		
⚠	28	WAS4000CC	WASHER	4		
⚠	29	QMF51E2-R80S	FUSE	1	F101	
⚠	30	QMF51A2-3R15	FUSE	1	F001	U, UB, US, UT
⚠		QMF51E2-1R6J1	FUSE	1	F001	EF, EN, G, BS
	31	E208175-003	REAR PANEL	1		BS, EF, EN, G
		E208175-004	REAR PANEL	1		U, UB, US, UT
	32	E73273-003	SPECIAL SCREW	13		BS, EF, EN, G
		E73273-003	SPECIAL SCREW	15		U, UB, US, UT
	33	E408091-001	EARTH PLUG	1		
⚠	34	QMP3900-200	POWER CORD	1		EF, EN, G, US
⚠		QMP5530-0085BS	POWER CORD	1		BS, UB
⚠		QMP7520-200	POWER CORD	1		U, UT
⚠	35	QHS4077-108	CORD STOPPER	1		
	36	E407321-002SM	PUSH BUTTON	1		BS, EF, EN, G
	37	EMZ3001-002	SHORT PIN	2		

AX-F1GD

⚠	Item	Part Number	Part Name	Q'ty	Description	Area
⚠	38	E406074-001	P.C.BOARD BRACKET	1	F002	U,UB,US,UT
	39	QMF51E2-1R6J1	FUSE	1		
	40	E307572-001	VINYL TIE	1		
	-	E309384-016	RATING LABEL	2		
	-	E407619-048	FTZ LABEL	1		UT
	-	E408843-001	APPROVAL LABEL	1		G
	-	E408919-001	RATING LABEL	1		EN
	-	QZL1031-101	LABEL	1		BS
	-	E61029-005	NUMBER LABEL	1		EF
	-					

The Marks for Designated Areas

BS the U.K.

EF Continental Europe

G Germany

EN Nordic Countries

UB Hong Kong

US Singapore

UT Taiwan

U Universal

No mark indicates all area.

Electrical Parts List

■ ENH-272 Mother PC Board Ass'y

TRANSISTORS

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	Q251	2SC2389(S,E)	SI.TRANSIST ROHM	
	Q351	2SC2878(B)	SI.TRANSIST 〓〓〓	
	Q352	2SC2878(B)	SI.TRANSIST 〓〓〓	
	Q353	DTA144ES	DIGITAL TRA ROHM	
	Q354	DTA144ES	DIGITAL TRA ROHM	
	Q355	DTA114TS	DIGITAL TRA ROHM	
	Q357	2SD2144S(VM)	SI.TRANSIST ROHM	
	Q358	2SD2144S(VM)	SI.TRANSIST ROHM	
	Q359	2SD2144S(VM)	SI.TRANSIST ROHM	
	Q360	2SD2144S(VM)	SI.TRANSIST ROHM	
	Q361	2SK301(P,Q)	F.E.T.	
	Q362	2SK301(P,Q)	F.E.T.	
	Q501	DTA114YS	DIGITAL TRA ROHM	
	Q502	DTA114YS	DIGITAL TRA ROHM	
	Q503	DTA114YS	DIGITAL TRA ROHM	
	Q521	DTA144ES	DIGITAL TRA ROHM	
	Q523	DTA144ES	DIGITAL TRA ROHM	
	Q524	DTA144ES	DIGITAL TRA ROHM	
	Q751	2SD437(Q,R)	SI.TRANSIST MATSUSHITA	
	Q752	2SD437(Q,R)	SI.TRANSIST MATSUSHITA	
	Q761	2SC2240(GR,BL)	SI.TRANSIST TOSHIBA	
	Q762	2SC2240(GR,BL)	SI.TRANSIST TOSHIBA	
	Q763	2SA970(GR)	SI.TRANSIST TOSHIBA	
	Q764	2SA970(GR)	SI.TRANSIST TOSHIBA	
	Q765	2SC2233(O,Y)	SI.TRANSIST TOSHIBA	
	Q766	2SC2233(O,Y)	SI.TRANSIST TOSHIBA	
	Q767	2SA965(Y)	SI.TRANSIST TOSHIBA	
	Q768	2SA965(Y)	SI.TRANSIST TOSHIBA	
	Q769	2SC3854LD(O,Y)	SI.TRANSIST SANKEN	
	Q770	2SC3854LD(O,Y)	SI.TRANSIST SANKEN	
	Q771	2SA1490LD(O,Y)	SI.TRANSIST SANKEN	
	Q772	2SA1490LD(O,Y)	SI.TRANSIST SANKEN	
	Q773	2SK170(BL)	F.E.T. TOSHIBA	
	Q774	2SK170(BL)	F.E.T. TOSHIBA	
	Q791	2SC1740S(R,S)	SI.TRANSIST ROHM	
	Q792	2SC1740S(R,S)	SI.TRANSIST ROHM	
	Q793	2SA933S(RS)	SI.TRANSIST	
	Q794	2SA933S(RS)	SI.TRANSIST	
	Q801	2SD2394(E,F)	SI.TRANSIST ROHM	
	Q802	2SB1565(E,F)	SI.TRANSIST	
	Q821	2SD1944(J,K)	SI.TRANSIST ROHM	
	Q901	2SA970(GR)	SI.TRANSIST TOSHIBA	
	Q902	2SA970(GR)	SI.TRANSIST TOSHIBA	
	Q903	2SC2240(GR,BL)	SI.TRANSIST TOSHIBA	
	Q904	2SC3311A(Q,R)	SI.TRANSIST MATSUSHITA	
	Q905	2SA733A(P,K)	SI.TRANSIST NEC	
	Q906	2SC2240(GR,BL)	SI.TRANSIST TOSHIBA	
	Q911	DTA144ES	DIGITAL TRA ROHM	
	Q912	DTA144ES	DIGITAL TRA ROHM	
	Q913	DTA144ES	DIGITAL TRA ROHM	
	Q914	DTA144ES	DIGITAL TRA ROHM	
	Q923	2SA970(GR)	SI.TRANSIST TOSHIBA	
	Q931	2SC3311A(Q,R)	SI.TRANSIST MATSUSHITA	

I. C. S.

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	IC101	NJM4580DD	I.C.(MONO-AN DAINICHI	
	IC201	TC9164N	I.C.(DIGI-MO TOSHIBA	
	IC231	VC4580DD	I.C.(MONO-AN DAINICHI	
	IC301	VC4580DD	I.C.(MONO-AN DAINICHI	
	IC361	VC4580DD	I.C.(MONO-AN DAINICHI	
	IC362	NJM4558D	I.C.(MONO-AN	
	IC363	NJM4558D	I.C.(MONO-AN	
	IC501	MN171202J6L	I.C.	BS
	IC501	MN171202J6L	I.C.	EF
	IC501	MN171202J6L	I.C.	EN
	IC501	MN171202J6L	I.C.	G
	IC501	MN171202J6L	I.C.	U
	IC501	MN171202J6L	I.C.	UB
	IC501	MN171202J6L	I.C.	US
	IC501	MN171202J6L	I.C.	UT
	IC502	GP1U571X	INFRARED DE SHARP	
	IC751	VC5022-2	I.C.(MONO-AN SANYO	
	IC752	VC5022-2	I.C.(MONO-AN SANYO	

DIODES

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	D211	MT22.7JB	ZENER DIODE ROHM	
	D212	MT22.7JB	ZENER DIODE ROHM	
	D213	MT22.7JB	ZENER DIODE ROHM	
	D214	MT22.7JB	ZENER DIODE ROHM	
	D271	MT22.7JB	ZENER DIODE ROHM	
	D350	SLR-34MC3F	L.E.D. ROHM	BS
	D350	SLR-34MC3F	L.E.D. ROHM	EF
	D350	SLR-34MC3F	L.E.D. ROHM	EN
	D350	SLR-34MC3F	L.E.D. ROHM	G
	D350	SLR-34MC3F	L.E.D. ROHM	U
	D350	SLR-34MC3F	L.E.D. ROHM	UB
	D350	SLR-34MC3F	L.E.D. ROHM	US
	D350	SLR-34MC3F	L.E.D. ROHM	UT
	D501	1SS119	SI.DIODE	
	D502	MT25.1JB	ZENER DIODE ROHM	
	D503	1SS119	SI.DIODE	
	D504	1SS119	SI.DIODE	
	D505	1SS119	SI.DIODE	
	D506	1SS119	SI.DIODE	
	D507	MA700	SI.DIODE MATSUSHITA	

DIODES

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	D508	SLR-342DCA47	L.E.D. ROHM	
	D509	SLR-342DCA47	L.E.D. ROHM	
	D510	SLR-342DCA47	L.E.D. ROHM	
	D511	SLR-342DCA47	L.E.D. ROHM	
	D512	SLR-342DCA47	L.E.D. ROHM	
	D513	SLR-342DCA47	L.E.D. ROHM	
	D514	SLA-380LT	L.E.D. ROHM	BS
	D514	SLR-342VC3F	L.E.D. ROHM	EF
	D514	SLR-342VC3F	L.E.D. ROHM	EN
	D514	SLR-342VC3F	L.E.D. ROHM	G
	D514	SLR-342VC3F	L.E.D. ROHM	U
	D514	SLR-342VC3F	L.E.D. ROHM	UB
	D514	SLR-342VC3F	L.E.D. ROHM	US
	D514	SLR-342VC3F	L.E.D. ROHM	UT
	D515	SLR-342VC3F	L.E.D. ROHM	
	D516	SLR-342VC3F	L.E.D. ROHM	
	D520	MT25.1JB	ZENER DIODE ROHM	
	D751	1SS119	SI.DIODE	
	D752	1SS119	SI.DIODE	
	D791	1SS119	SI.DIODE	
	D792	1SS119	SI.DIODE	
	D793	1SS119	SI.DIODE	
	D794	1SS119	SI.DIODE	
Δ	D801	30DL2FC	SI.DIODE NIHONINTER	
Δ	D802	30DL2FC	SI.DIODE NIHONINTER	
Δ	D803	30DL2FC	SI.DIODE NIHONINTER	
Δ	D804	30DL2FC	SI.DIODE NIHONINTER	
	D811	MT218JC	ZENER DIODE ROHM	
	D812	MT218JC	ZENER DIODE ROHM	
	D821	11E2	SI.DIODE NIHONINTER	
	D822	11E2	SI.DIODE NIHONINTER	
	D823	11E2	SI.DIODE NIHONINTER	
	D824	11E2	SI.DIODE NIHONINTER	
	D831	MT26.2JC	ZENER DIODE ROHM	
	D901	1SS119	SI.DIODE 〓〓〓	
	D902	1SS119	SI.DIODE 〓〓〓	
	D905	1SS119	SI.DIODE 〓〓〓	
	D910	MT25.1JB	ZENER DIODE ROHM	

CAPACITORS

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	C100	QFN81HJ-103	0.01MF 50V METAL.MYLA	
	C101	QETC1HM-106ZN	10MF 50V AL E.CAPAC	
	C102	QETC1HM-106ZN	10MF 50V AL E.CAPAC	
	C103	QCS31HJ-1012	100PF 50V CER.CAPACI	
	C104	QCS31HJ-1012	100PF 50V CER.CAPACI	
	C105	QCS31HJ-1012	100PF 50V CER.CAPACI	BS
	C105	QCS31HJ-1012	100PF 50V CER.CAPACI	EF
	C105	QCS31HJ-1012	100PF 50V CER.CAPACI	EN
	C105	QCS31HJ-1012	100PF 50V CER.CAPACI	G
	C105	QCS31HJ-1012	100PF 50V CER.CAPACI	U
	C105	QCS31HJ-1012	100PF 50V CER.CAPACI	UB
	C105	QCS31HJ-1012	100PF 50V CER.CAPACI	US
	C105	QCS31HJ-1012	100PF 50V CER.CAPACI	UT
	C106	QCS31HJ-1012	100PF 50V CER.CAPACI	BS
	C106	QCS31HJ-1012	100PF 50V CER.CAPACI	EF
	C106	QCS31HJ-1012	100PF 50V CER.CAPACI	EN
	C106	QCS31HJ-1012	100PF 50V CER.CAPACI	G
	C106	QCS31HJ-1012	100PF 50V CER.CAPACI	U
	C106	QCS31HJ-1012	100PF 50V CER.CAPACI	UB
	C106	QCS31HJ-1012	100PF 50V CER.CAPACI	US
	C106	QCS31HJ-1012	100PF 50V CER.CAPACI	UT
	C107	QCS31HJ-1012	100PF 50V CER.CAPACI	BS
	C107	QCS31HJ-1012	100PF 50V CER.CAPACI	EF
	C107	QCS31HJ-1012	100PF 50V CER.CAPACI	EN
	C107	QCS31HJ-1012	100PF 50V CER.CAPACI	G
	C107	QCS31HJ-1012	100PF 50V CER.CAPACI	U
	C107	QCS31HJ-1012	100PF 50V CER.CAPACI	UB
	C107	QCS31HJ-1012	100PF 50V CER.CAPACI	US
	C107	QCS31HJ-1012	100PF 50V CER.CAPACI	UT
	C108	QCS31HJ-1012	100PF 50V CER.CAPACI	BS
	C108	QCS31HJ-1012	100PF 50V CER.CAPACI	EF
	C108	QCS31HJ-1012	100PF 50V CER.CAPACI	EN
	C108	QCS31HJ-1012	100PF 50V CER.CAPACI	G
	C108	QCS31HJ-1012	100PF 50V CER.CAPACI	U
	C108	QCS31HJ-1012	100PF 50V CER.CAPACI	UB
	C108	QCS31HJ-1012	100PF 50V CER.CAPACI	US
	C108	QCS31HJ-1012	100PF 50V CER.CAPACI	UT
	C111	QETC1HM-106ZN	10MF 50V AL E.CAPAC	
	C112	QETC1HM-106ZN	10MF 50V AL E.CAPAC	
	C113	QFN81HJ-682	6800PF 50V METAL.MYLA	
	C114	QFN81HJ-682	6800PF 50V METAL.MYLA	
	C115	QFN81HJ-152	3300PF 50V METAL.MYLA	
	C116	QFN81HJ-152	1500PF 50V METAL.MYLA	
	C117	QCS31HJ-3912	390PF 50V CER.CAPACI	
	C118	QCS31HJ-3912	390PF 50V CER.CAPACI	
	C121	QETC1EM-107ZN	100MF 25V E.CAPACITO	
	C122	QETC1EM-107ZN	100MF 25V E.CAPACITO	
	C123	QETCOJM-107ZN	100MF 6.3V AL E.CAPAC	
	C124	QETCOJM-107ZN	100MF 6.3V AL E.CAPAC	
	C201	QCS31HJ-1012	100PF 50V CER.CAPACI	
	C202	QCS31HJ-1012	100PF 50V CER.CAPACI	
	C203	QCS31HJ-1012	100PF 50V CER.CAPACI	
	C204	QCS31HJ-1012	100PF 50V CER.CAPACI	
	C205	QCS31HJ-1012	100PF 50V CER.CAPACI	
	C206	QCS31HJ-1012	100PF 50V CER.CAPACI	
	C207	QCS31HJ-1012	100PF 50V CER.CAPACI	
	C208	QCS31HJ-1012	100PF 50V CER.CAPACI	
	C209	QCS31HJ-3312	330PF 50V CER.CAPACI	BS
	C209	QCS31HJ-3312	330PF 50V CER.CAPACI	EF
	C209	QCS31HJ-3312	330PF 50V CER.CAPACI	EN

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CAPACITORS

Δ	ITEM	PART NUMBER	DESCRIPTION			AREA
	C398	QCS21HJ-220A	22PF	50V	CER.CAPACI	U
	C398	QCS21HJ-220A	22PF	50V	CER.CAPACI	UB
	C398	QCS21HJ-220A	22PF	50V	CER.CAPACI	US
	C398	QCS21HJ-220A	22PF	50V	CER.CAPACI	UT
	C501	QETB1HM-225	2.2MF	50V	AL E.CAPAC	
	C502	QCB81HK-221Y	220PF	50V	CER.CAPACI	
	C503	QETB1HM-225	2.2MF	50V	AL E.CAPAC	
	C504	QCVB1CM-103Y	0.01MF	16V	CER.CAPACI	
	C505	EEZ0601-108	1000MF		AL E.CAPAC	
	C506	QC20202-155	1.5MF	25V	CER.RESIST	
	C507	QETB1AM-227	220MF	10V	E.CAPACITO	
	C510	QEK50JM-476	47MF	6.3V	AL E.CAPAC	
	C521	QETB1CM-226	22MF	16V	E.CAPACITO	
	C700	QCF21HP-223A	0.022MF	50V	CER.CAPACI	BS
	C700	QCF21HP-223A	0.022MF	50V	CER.CAPACI	EF
	C700	QCF21HP-223A	0.022MF	50V	CER.CAPACI	EN
	C700	QCF21HP-223A	0.022MF	50V	CER.CAPACI	G
	C701	EET2508-226ZE	22MF		E.CAPACITO	
	C702	EET2508-226ZE	22MF		E.CAPACITO	
	C711	QCS31HJ-100Z	10PF	50V	CER.CAPACI	
	C712	QCS31HJ-100Z	10PF	50V	CER.CAPACI	
	C761	QFP81HJ-680	68PF	50V	POLYPROP.	BS
	C761	QFP81HJ-680	68PF	50V	POLYPROP.	EF
	C761	QFP81HJ-680	68PF	50V	POLYPROP.	EN
	C761	QFP81HJ-680	68PF	50V	POLYPROP.	G
	C761	QFP81HJ-680	68PF	50V	POLYPROP.	UB
	C761	QFP81HJ-680	68PF	50V	POLYPROP.	US
	C761	QFP81HJ-680	68PF	50V	POLYPROP.	UT
	C762	QFP81HJ-680	68PF	50V	POLYPROP.	BS
	C762	QFP81HJ-680	68PF	50V	POLYPROP.	EF
	C762	QFP81HJ-680	68PF	50V	POLYPROP.	EN
	C762	QFP81HJ-680	68PF	50V	POLYPROP.	G
	C762	QFP81HJ-680	68PF	50V	POLYPROP.	U
	C762	QFP81HJ-680	68PF	50V	POLYPROP.	UB
	C762	QFP81HJ-680	68PF	50V	POLYPROP.	US
	C762	QFP81HJ-680	68PF	50V	POLYPROP.	UT
	C763	QFP81HJ-680	68PF	50V	POLYPROP.	BS
	C763	QFP81HJ-680	68PF	50V	POLYPROP.	EF
	C763	QFP81HJ-680	68PF	50V	POLYPROP.	EN
	C763	QFP81HJ-680	68PF	50V	POLYPROP.	G
	C763	QFP81HJ-680	68PF	50V	POLYPROP.	UB
	C763	QFP81HJ-680	68PF	50V	POLYPROP.	US
	C763	QFP81HJ-680	68PF	50V	POLYPROP.	UT
	C764	QFP81HJ-680	68PF	50V	POLYPROP.	BS
	C764	QFP81HJ-680	68PF	50V	POLYPROP.	EF
	C764	QFP81HJ-680	68PF	50V	POLYPROP.	EN
	C764	QFP81HJ-680	68PF	50V	POLYPROP.	G
	C764	QFP81HJ-680	68PF	50V	POLYPROP.	U
	C764	QFP81HJ-680	68PF	50V	POLYPROP.	UB
	C764	QFP81HJ-680	68PF	50V	POLYPROP.	US
	C764	QFP81HJ-680	68PF	50V	POLYPROP.	UT
	C773	QFV81HJ-473	0.047MF	50V	THIN FILM	
	C774	QFV81HJ-473	0.047MF	50V	THIN FILM	
	C781	QFVC1HJ-104ZN	0.1MF	50V	METAL.MYLA	
	C782	QFVC1HJ-104ZN	0.1MF	50V	METAL.MYLA	
	C783	QFVC1HJ-104ZN	0.1MF	50V	METAL.MYLA	
	C784	QFVC1HJ-104ZN	0.1MF	50V	METAL.MYLA	
	C787	QFVC1HJ-104ZN	0.1MF	50V	METAL.MYLA	BS
	C787	QFVC1HJ-104ZN	0.1MF	50V	METAL.MYLA	EF
	C787	QFVC1HJ-104ZN	0.1MF	50V	METAL.MYLA	EN
	C787	QFVC1HJ-104ZN	0.1MF	50V	METAL.MYLA	G
	C788	QFVC1HJ-104ZN	0.1MF	50V	METAL.MYLA	BS
	C788	QFVC1HJ-104ZN	0.1MF	50V	METAL.MYLA	EF
	C788	QFVC1HJ-104ZN	0.1MF	50V	METAL.MYLA	EN
	C788	QFVC1HJ-104ZN	0.1MF	50V	METAL.MYLA	G
	C789	QFVC1HJ-103ZN	0.01MF	50V	METAL.MYLA	BS
	C789	QFVC1HJ-103ZN	0.01MF	50V	METAL.MYLA	EF
	C789	QFVC1HJ-103ZN	0.01MF	50V	METAL.MYLA	EN
	C789	QFVC1HJ-103ZN	0.01MF	50V	METAL.MYLA	G
	C790	QFVC1HJ-103ZN	0.01MF	50V	METAL.MYLA	BS
	C790	QFVC1HJ-103ZN	0.01MF	50V	METAL.MYLA	EF
	C790	QFVC1HJ-103ZN	0.01MF	50V	METAL.MYLA	EN
	C790	QFVC1HJ-103ZN	0.01MF	50V	METAL.MYLA	G
	C791	QCB81HK-102Y	1000PF	50V	CER.CAPACI	BS
	C791	QCB81HK-102Y	1000PF	50V	CER.CAPACI	EF
	C791	QCB81HK-102Y	1000PF	50V	CER.CAPACI	EN
	C791	QCB81HK-102Y	1000PF	50V	CER.CAPACI	G
	C792	QCB81HK-102Y	1000PF	50V	CER.CAPACI	BS
	C792	QCB81HK-102Y	1000PF	50V	CER.CAPACI	EF
	C792	QCB81HK-102Y	1000PF	50V	CER.CAPACI	EN
	C792	QCB81HK-102Y	1000PF	50V	CER.CAPACI	G
	C801	EEW5009-828E	8200MF		E.CAPACITO	
	C802	EEW5009-828E	8200MF		E.CAPACITO	
	C807	EETB1EM-476E	47MF	25V	E.CAPACITO	
	C808	EETB1EM-476E	47MF	25V	E.CAPACITO	
	C810	QCHB1E2-223	0.022MF	25V	CER.CAPACI	
	C811	EETB1HM-227E	220MF	50V	AL E.CAPAC	
	C812	EETB1HM-227E	220MF	50V	AL E.CAPAC	
	C815	EETB1EM-226E	22MF	25V	ELECTRO	
	C816	EETB1EM-226E	22MF	25V	ELECTRO	
	C821	QETB1EM-228	2200MF	25V	E.CAPACITO	
	C824	QETB1AM-107	100MF	10V	AL E.CAPAC	
	C831	QCF21HP-223A	0.022MF	50V	CER.CAPACI	
	C840	QFN82AJ-104	0.1MF	100V	MYLAR CAPA	
	C843	QFN82AJ-104	0.1MF	100V	MYLAR CAPA	
	C844	QFN82AJ-104	0.1MF	100V	MYLAR CAPA	
	C845	QFN82AJ-104	0.1MF	100V	MYLAR CAPA	
	C846	QFN82AJ-104	0.1MF	100V	MYLAR CAPA	
	C851	EETC2AM-105ZE	1MF	100V	E.CAPACITO	
	C852	EETC2AM-105ZE	1MF	100V	E.CAPACITO	
	C901	QETB1HM-105	1MF	50V	AL E.CAPAC	
	C903	QETB1HM-226E	22MF	50V	E.CAPACITO	
	C904	QETB1CM-476	47MF	16V	AL E.CAPAC	

RESISTORS

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	R101	QRD161J-222	2.2K 1/6W CARBON RES	
	R102	QRD161J-222	2.2K 1/6W CARBON RES	
	R103	QRD161J-473	47K 1/6W CARBON RES	
	R104	QRD161J-473	47K 1/6W CARBON RES	
	R105	QRD161J-474	470K 1/6W CARBON RES	
	R106	QRD161J-474	470K 1/6W CARBON RES	
	R107	QRD161J-393	39K 1/6W CARBON RES	
	R108	QRD161J-393	39K 1/6W CARBON RES	
	R109	QRD161J-561	560 1/6W CARBON RES	
	R110	QRD161J-561	560 1/6W CARBON RES	
	R111	QRD161J-101	100 1/6W CARBON RES	
	R112	QRD161J-101	100 1/6W CARBON RES	
	R113	QRD161J-104	100K 1/6W CARBON RES	
	R114	QRD161J-104	100K 1/6W CARBON RES	
	R121	QRD14CJ-471SX	470 1/4W UNF. CARBON	
	R122	QRD14CJ-471SX	470 1/4W UNF. CARBON	
	R201	QRD161J-331	330 1/6W CARBON RES	
	R202	QRD161J-331	330 1/6W CARBON RES	
	R203	QRD161J-331	330 1/6W CARBON RES	
	R204	QRD161J-331	330 1/6W CARBON RES	
	R205	QRD161J-331	330 1/6W CARBON RES	
	R206	QRD161J-331	330 1/6W CARBON RES	
	R207	QRD161J-331	330 1/6W CARBON RES	
	R208	QRD161J-331	330 1/6W CARBON RES	
	R209	QRD161J-331	330 1/6W CARBON RES	
	R210	QRD161J-331	330 1/6W CARBON RES	
	R211	QRD161J-474	470K 1/6W CARBON RES	
	R212	QRD161J-474	470K 1/6W CARBON RES	
	R213	QRD161J-474	470K 1/6W CARBON RES	
	R214	QRD161J-474	470K 1/6W CARBON RES	
	R215	QRD161J-474	470K 1/6W CARBON RES	
	R216	QRD161J-474	470K 1/6W CARBON RES	
	R217	QRD161J-474	470K 1/6W CARBON RES	
	R218	QRD161J-474	470K 1/6W CARBON RES	
	R219	QRD161J-105	1M 1/6W CARBON RES	
	R220	QRD161J-105	1M 1/6W CARBON RES	
	R221	QRD161J-222	2.2K 1/6W CARBON RES	
	R222	QRD161J-222	2.2K 1/6W CARBON RES	
	R231	QRD161J-101	100 1/6W CARBON RES	
	R232	QRD161J-101	100 1/6W CARBON RES	
	R233	QRD161J-105	1M 1/6W CARBON RES	
	R234	QRD161J-105	1M 1/6W CARBON RES	
	R235	QRD161J-623	62K 1/6W CARBON RES	
	R236	QRD161J-623	62K 1/6W CARBON RES	
	R241	QRD14CJ-471SX	470 1/4W UNF. CARBON	
	R242	QRD14CJ-471SX	470 1/4W UNF. CARBON	
	R251	QRD161J-122	1.2K 1/6W CARBON RES	
	R252	QRD161J-122	1.2K 1/6W CARBON RES	
	R255	QRD161J-223	22K 1/6W CARBON RES	
	R256	QRD161J-333	33K 1/6W CARBON RES	
	R261	QRD161J-331	330 1/6W CARBON RES	
	R262	QRD161J-331	330 1/6W CARBON RES	
	R263	QRD161J-331	330 1/6W CARBON RES	
	R264	QRD161J-331	330 1/6W CARBON RES	
	R265	QRD161J-331	330 1/6W CARBON RES	
	R266	QRD161J-331	330 1/6W CARBON RES	
	R267	QRD161J-331	330 1/6W CARBON RES	
	R268	QRD161J-331	330 1/6W CARBON RES	
	R271	QRD161J-474	470K 1/6W CARBON RES	
	R272	QRD161J-474	470K 1/6W CARBON RES	
	R273	QRD161J-474	470K 1/6W CARBON RES	
	R274	QRD161J-474	470K 1/6W CARBON RES	
	R275	QRD161J-105	1M 1/6W CARBON RES	
	R276	QRD161J-105	1M 1/6W CARBON RES	
	R277	QRD161J-105	1M 1/6W CARBON RES	
	R278	QRD161J-105	1M 1/6W CARBON RES	
	R301	QRD161J-123	12K 1/6W CARBON RES	
	R302	QRD161J-123	12K 1/6W CARBON RES	
	R303	QRD161J-224	220K 1/6W CARBON RES	
	R304	QRD161J-224	220K 1/6W CARBON RES	
	R305	QRD161J-123	12K 1/6W CARBON RES	
	R306	QRD161J-123	12K 1/6W CARBON RES	
	R331	QRD14CJ-471SX	470 1/4W UNF. CARBON	
	R332	QRD14CJ-471SX	470 1/4W UNF. CARBON	
	R341	QRD161J-102	1K 1/6W CARBON RES	
	R342	QRD161J-102	1K 1/6W CARBON RES	
	R343	QRD161J-105	1M 1/6W CARBON RES	
	R344	QRD161J-102	1K 1/6W CARBON RES	
	R345	QRD161J-104	100K 1/6W CARBON RES	
	R350	QRD161J-221	220 1/6W CARBON RES	BS
	R350	QRD161J-221	220 1/6W CARBON RES	EF
	R350	QRD161J-221	220 1/6W CARBON RES	EN
	R350	QRD161J-221	220 1/6W CARBON RES	G
	R350	QRD161J-221	220 1/6W CARBON RES	UB
	R350	QRD161J-221	220 1/6W CARBON RES	UT
	R350	QRD161J-221	220 1/6W CARBON RES	
	R351	QRD161J-471	470 1/6W CARBON RES	
	R352	QRD161J-471	470 1/6W CARBON RES	
	R357	QRD161J-103	10K 1/6W CARBON RES	
	R358	QRD161J-103	10K 1/6W CARBON RES	
	R359	QRD161J-103	10K 1/6W CARBON RES	
	R360	QRD161J-103	10K 1/6W CARBON RES	
	R371	QRD161J-101	100 1/6W CARBON RES	
	R372	QRD161J-101	100 1/6W CARBON RES	
	R373	QRD161J-104	100K 1/6W CARBON RES	
	R374	QRD161J-104	100K 1/6W CARBON RES	
	R375	QRD161J-223	22K 1/6W CARBON RES	
	R376	QRD161J-223	22K 1/6W CARBON RES	
	R381	QRD161J-332YTT	3.3K 1/6W CARBON RES	
	R382	QRD161J-332YTT	3.3K 1/6W CARBON RES	
	R383	QRD161J-332YTT	3.3K 1/6W CARBON RES	
	R384	QRD161J-332YTT	3.3K 1/6W CARBON RES	
	R385	QRD161J-223	22K 1/6W CARBON RES	
	R386	QRD161J-223	22K 1/6W CARBON RES	
	R387	QRD161J-104	100K 1/6W CARBON RES	
	R388	QRD161J-104	100K 1/6W CARBON RES	
	R389	QRD161J-223	22K 1/6W CARBON RES	
	R390	QRD161J-223	22K 1/6W CARBON RES	
	R391	QRD161J-474	470K 1/6W CARBON RES	

RESISTORS

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	R392	QRD161J-474	470K 1/6W CARBON RES	
	R393	QRD161J-391	390 1/6W CARBON RES	
	R394	QRD161J-391	390 1/6W CARBON RES	
	R395	QRD14CJ-101S	100 1/4W UNF. CARBON	
	R396	QRD14CJ-101S	100 1/4W UNF. CARBON	
	R501	QRD161J-103	10K 1/6W CARBON RES	
	R502	QRD161J-103	10K 1/6W CARBON RES	
	R503	QRD161J-102	1K 1/6W CARBON RES	
	R504	QRD161J-221	220 1/6W CARBON RES	
	R505	QRD161J-102	1K 1/6W CARBON RES	
	R506	QRD161J-103	10K 1/6W CARBON RES	
	R508	QRD161J-223	22K 1/6W CARBON RES	
	R509	QRD161J-221	220 1/6W CARBON RES	
	R510	QRD161J-271	270 1/6W CARBON RES	
	R511	QRD161J-181	180 1/6W CARBON RES	
	R511	QRD161J-181	180 1/6W CARBON RES	EF
	R511	QRD161J-181	180 1/6W CARBON RES	EN
	R511	QRD161J-181	180 1/6W CARBON RES	G
	R511	QRD161J-181	180 1/6W CARBON RES	UB
	R511	QRD161J-181	180 1/6W CARBON RES	US
	R511	QRD161J-181	180 1/6W CARBON RES	UT
	R511	QRD161J-181	180 1/6W CARBON RES	BS
	R511	QRD161J-471	470 1/6W CARBON RES	
	R512	QRD161J-271	270 1/6W CARBON RES	
	R513	QRD161J-473	47K 1/6W CARBON RES	
	R514	QRD161J-103	10K 1/6W CARBON RES	
	R515	QRD161J-103	10K 1/6W CARBON RES	
	R516	QRD161J-103	10K 1/6W CARBON RES	
	R517	QRD161J-103	10K 1/6W CARBON RES	
	R518	QRD161J-103	10K 1/6W CARBON RES	
	R521	QRD161J-103	10K 1/6W CARBON RES	
	R522	QRD161J-105	1M 1/6W CARBON RES	
	R523	QRD161J-105	1M 1/6W CARBON RES	
	R524	QRD161J-105	1M 1/6W CARBON RES	
	R711	ERD141J-104SY	100K 1/4W CARBON RES	
	R712	ERD141J-104SY	100K 1/4W CARBON RES	
	R751	QVPE601-501	500 0.15W TRIMMER RE	
	R752	QVPE601-501	500 0.15W TRIMMER RE	
	R755	ERT-D2WFL351S	350 1/4W NEGATIVE T	
	R756	ERT-D2WFL351S	350 1/4W NEGATIVE T	
	R757	QRD161J-101	100 1/6W CARBON RES	
	R758	QRD161J-101	100 1/6W CARBON RES	
	R759	QRD161J-471	470 1/6W CARBON RES	
	R760	QRD161J-471	470 1/6W CARBON RES	
	R761	QRD161J-391	390 1/6W CARBON RES	
	R762	QRD161J-391	390 1/6W CARBON RES	
	R763	QRD14CJ-122SX	1.2K 1/4W UNF. CARBON	
	R764	QRD14CJ-122SX	1.2K 1/4W UNF. CARBON	
	R765	QRD14CJ-101S	100 1/4W UNF. CARBON	
	R766	QRD14CJ-101S	100 1/4W UNF. CARBON	
	R767	QRD14CJ-477SX	4.7 1/4W UNF. CARBON	
	R768	QRD14CJ-477SX	4.7 1/4W UNF. CARBON	
	R769	QRD14CJ-477SX	4.7 1/4W UNF. CARBON	
	R770	QRD14CJ-477SX	4.7 1/4W UNF. CARBON	
	R771	ERF032K-R22	0.22 3W CEM. RESIST	
	R772	ERF032K-R22	0.22 3W CEM. RESIST	
	R777	QRD14CJ-470SX	47 1/4W UNF. CARBON	
	R778	QRD14CJ-470SX	47 1/4W UNF. CARBON	
	R779	QRD14CJ-470SX	47 1/4W UNF. CARBON	
	R780	QRD14CJ-470SX	47 1/4W UNF. CARBON	
	R781	QRD125J-100	10 1/2W UNF. CARBON	
	R782	QRD125J-100	10 1/2W UNF. CARBON	
	R783	QRG022J-100AM	10 2W OXIDE META	
	R784	QRG022J-100AM	10 2W OXIDE META	
	R785	QRG022J-821AM	820 2W OXIDE META	
	R786	QRG022J-821AM	820 2W OXIDE META	
	R787	QRZ0077-100	10 1/4W FUSIBLE RE	BS
	R787	QRZ0077-100	10 1/4W FUSIBLE RE	EF
	R787	QRZ0077-100	10 1/4W FUSIBLE RE	EN
	R787	QRZ0077-100	10 1/4W FUSIBLE RE	G
	R787	QRZ0077-100	10 1/4W FUSIBLE RE	BS
	R788	QRZ0077-100	10 1/4W FUSIBLE RE	EF
	R788	QRZ0077-100	10 1/4W FUSIBLE RE	EN
	R788	QRZ0077-100	10 1/4W FUSIBLE RE	G
	R791	QRD14CJ-471SX	470 1/4W UNF. CARBON	
	R792	QRD14CJ-471SX	470 1/4W UNF. CARBON	
	R793	QRD14CJ-471SX	470 1/4W UNF. CARBON	
	R794	QRD14CJ-471SX	470 1/4W UNF. CARBON	
	R795	QRD14CJ-331SX	330 1/4W UNF. CARBON	
	R796	QRD14CJ-331SX	330 1/4W UNF. CARBON	
	R797	QRD14CJ-331SX	330 1/4W UNF. CARBON	
	R798	QRD14CJ-331SX	330 1/4W UNF. CARBON	
	R801	QRZ0077-100	10 1/4W FUSIBLE RE	
	R802	QRZ0077-100	10 1/4W FUSIBLE RE	
	R803	QRD161J-822	8.2K 1/6W CARBON RES	
	R804	QRD161J-822	8.2K 1/6W CARBON RES	
	R805	QRD161J-103	10K 1/6W CARBON RES	
	R806	QRD161J-103	10K 1/6W CARBON RES	
	R811	QRD14CJ-330SX	33 1/4W UNF. CARBON	
	R812	QRD14CJ-330SX	33 1/4W UNF. CARBON	
	R821	QRD161J-122	1.2K 1/6W CARBON RES	
	R851	ERD141J-8R2S	8.2 1/4W CARBON RES	
	R901	QRD161J-104	100K 1/6W CARBON RES	
	R902	QRD161J-823	82K 1/6W CARBON RES	
	R903	QRD161J-272	2.7K 1/6W CARBON RES	
	R904	QRD161J-272	2.7K 1/6W CARBON RES	
	R905	QRD161J-153	15K 1/6W CARBON RES	
	R906	QRD161J-153	15K 1/6W CARBON RES	
	R907	QRD161J-223	22K 1/6W CARBON RES	
	R908	QRD161J-223	22K 1/6W CARBON RES	
	R909	QRD161J-103	10K 1/6W CARBON RES	
	R910	QRD161J-332YTT	3.3K 1/6W CARBON RES	
	R911	QRD161J-103	10K 1/6W CARBON RES	
	R912	QRD161J-473	47K 1/6W CARBON RES	
	R913	QRD161J-103	10K 1/6W CARBON RES	
	R914	QRD161J-104	100K 1/6W CARBON RES	
	R915	QRD161J-473	47K 1/6W CARBON RES	
	R916	QRD161J-103	10K 1/6W CARBON RES	
	R917	QRD161J-222	2.2K 1/6W CARBON RES	
	R919	QRD161J-512	5.1K 1/6W CARBON RES	
	R920	QRD161J-512	5.1K 1/6W CARBON RES	

RESISTORS

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	R921	QRD161J-563	56K 1/4W CARBON RES	
	R922	QRD161J-473	47K 1/4W CARBON RES	
	R923	QRD161J-103	10K 1/4W CARBON RES	
	R924	QRD161J-103	10K 1/4W CARBON RES	
Δ	R931	QRG022J-391AM	390 2W OXIDE META	EF
Δ	R931	QRG022J-391AM	390 2W OXIDE META	EN
Δ	R931	QRG022J-391AM	390 2W OXIDE META	G
Δ	R931	QRG022J-391AM	390 2W OXIDE META	U
Δ	R931	QRG022J-391AM	390 2W OXIDE META	UB
Δ	R931	QRG022J-391AM	390 2W OXIDE META	US
Δ	R931	QRG022J-391AM	390 2W OXIDE META	UT
	R932	QRZ0077-121X	120 1/4W FUSIBLE RE	
	R933	QRD161J-222	2.2K 1/4W CARBON RES	

OTHERS

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
		BUSH-PUL	BUSHING	
		EMW10434-102	CIRCUIT BOA	BS
		EMW10434-102	CIRCUIT BOA	EF
		EMW10434-102	CIRCUIT BOA	EN
		EMW10434-102	CIRCUIT BOA	G
		EMW10434-102	CIRCUIT BOA	U
		EMW10434-102	CIRCUIT BOA	UB
		EMW10434-102	CIRCUIT BOA	US
		EMW10434-102	CIRCUIT BOA	UT
		E306805-047	SPACER	
		E308970-001	HEAT SINK	
		E308971-001ST	HEAT SINK B	
		E308971-002ST	HEAT SINK B	
		E73525-003	SCREW	
		E73967-003	SPACER	
		GBSG3008CC	TAPPING SCR	
		QWE690-14RR	VINYL WIRE	
		QWE692-14RR	VINYL WIRE	
		QWE696-16RR	VINYL WIRE	
		SBSG3008CC	TAPPING SCR	
	J101	EMN00TV-208A	PIN JACK	
	J102	EMN00TV-406A	JACK BOARD	
	J103	EMN00TV-403A	JACK BOARD	
	J104	EMN00TV-406A	JACK BOARD	
	J105	EMN00TV-406A	JACK BOARD	

OTHERS

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	J501	QMS3501-020	PIN JACK	
	J701	EMB00TV-404A	SPK.TERMINA	
	J791	QMS3L63-E40G	MINI JACK	
	K503	ENZ8101-008	INDUCTOR	
	L781	EQL0001-1R0	INDUCTOR	
	L782	EQL0001-1R0	INDUCTOR	
	P202	EMV5109-009B	CONNECT TER	
	P203	EMV5109-008B	CONNECTOR	
	P500	EMV5109-014B	PLUG CORD A	
	S501	ESP0001-023M	TACT SWITCH	
	S502	ESP0001-023M	TACT SWITCH	
	S503	ESP0001-023M	TACT SWITCH	
	BC202	EWS299-031B	SOCKET WIRE	
	BC203	EWS268-A416	SOCKET WIRE	
	BC500	EWS26E-A416	SOCKET WIRE	
	EP300	EMZ4002-001Z	EARTH PLATE	
	EP900	EMZ4002-001Z	EARTH PLATE	
	FC101	EMG7331-002	FEEDER CLAM	
	FC102	EMG7331-002U	CONTACT CLI	
	FW801	EWR33B-10SST	FLAT WIRE A	
	HS801	E70306-001	HEAT SINK	
	HS802	E70306-001	HEAT SINK	
	HS821	E70945-H25	HEAT SINK	
	JA201	EMV7125-012R	CONNECT TER	
	JB201	EMV5125-012	CONNECT TER	
	JB301	EMV5125-012	CONNECT TER	
	JB321	EMV5125-009	CONNECT TER	
	JB700	EMV5140-015	CONNECT TER	
	JS501	QMJ4002-E01	PUSH SWITCH	
	PA790	VMC0194-S05	FEMALE CONN	
	PB350	EMV5103-002B	MALE CONNec	
	PB790	VMC0194-P05	MALE CONNec	
	RY251	ESK5D24-21AF	RELAY	
	RY901	ESK7D24-2120	RELAY	BS
	RY901	ESK7D24-2120	RELAY	EF
	RY901	ESK7D24-2120	RELAY	EN
	RY901	ESK7D24-2120	RELAY	G
	RY901	ESK7D24-2120	RELAY	U
	RY901	ESK7D24-2120	RELAY	UB
	RY901	ESK7D24-2120	RELAY	US
	RY901	ESK7D24-2120	RELAY	UT
	XT501	ECX0060-000EM	CERAMIC RES	

■ ENE-095 Pre.Driver PC Board Ass'y

TRANSISTORS

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	Q701	2SC2240(GR.BL)	SI.TRANSIST TOSHIBA	
	Q702	2SC2240(GR.BL)	SI.TRANSIST TOSHIBA	
	Q703	2SC2240(GR.BL)	SI.TRANSIST TOSHIBA	
	Q704	2SC2240(GR.BL)	SI.TRANSIST TOSHIBA	
	Q705	2SC1775AV(F1)	SI.TRANSIST HITACHI	
	Q706	2SC1775AV(F1)	SI.TRANSIST HITACHI	
	Q707	2SA933LN(R.S)	SI.TRANSIST ROHM	
	Q708	2SA933LN(R.S)	SI.TRANSIST ROHM	
	Q709	2SA1207(S.T)	SI.TRANSIST SANYO	
	Q710	2SA1207(S.T)	SI.TRANSIST SANYO	
	Q711	2SC2909(S.T)	SI.TRANSIST SANYO	
	Q712	2SC2909(S.T)	SI.TRANSIST SANYO	
	Q713	2SA933LN(R.S)	SI.TRANSIST ROHM	
	Q714	2SA933LN(R.S)	SI.TRANSIST ROHM	
	Q921	DTC144ES	DIGITAL TRA ROHM	
	Q922	DTC114VS	DIGITAL TRA ROHM	

I. C. S.

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	IC351	LB1639-CV	I.C(DIGI-OT SANYO	

DIODES

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	D355	11E2	SI.DIODE NIHONINTER	
	D356	11E2	SI.DIODE NIHONINTER	
	D700	SLR-342MCA47	L.E.D. ROHM	
	D711	MT22.7JB	ZENER DIODE ROHM	
	D712	MT22.7JB	ZENER DIODE ROHM	
	D713	1SS119	SI.DIODE	
	D714	1SS119	SI.DIODE	
	D721	MT26.2JC	ZENER DIODE ROHM	

CAPACITORS

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	C313	QFN81HJ-153	0.015MF 50V MYLAR CAPA	
	C314	QFN81HJ-153	0.015MF 50V MYLAR CAPA	
	C315	QFVB1HJ-124N	0.12MF 50V THIN FILM	
	C316	QFVB1HJ-124N	0.12MF 50V THIN FILM	
	C317	QFVB1HJ-124N	0.12MF 50V THIN FILM	
	C318	QFVB1HJ-124N	0.12MF 50V THIN FILM	
	C355	QETB1AM-476	47MF 10V E.CAPACITO	
	C356	QCHB1EZ-225	0.022MF 25V CER.CAPACI	
	C703	QFP81HJ-680	68PF 50V POLYPROPY.	
	C704	QFP81HJ-680	68PF 50V POLYPROPY.	
	C705	QCS31HJ-331Z	330PF 50V CER.CAPACI	BS
	C705	QCS31HJ-331Z	330PF 50V CER.CAPACI	EF
	C705	QCS31HJ-331Z	330PF 50V CER.CAPACI	EN
	C705	QCS31HJ-331Z	330PF 50V CER.CAPACI	G
	C705	QCS31HJ-331Z	330PF 50V CER.CAPACI	U
	C705	QCS31HJ-331Z	330PF 50V CER.CAPACI	UB
	C705	QCS31HJ-331Z	330PF 50V CER.CAPACI	UT
	C706	QCS31HJ-331Z	330PF 50V CER.CAPACI	BS
	C706	QCS31HJ-331Z	330PF 50V CER.CAPACI	EF
	C706	QCS31HJ-331Z	330PF 50V CER.CAPACI	EN
	C706	QCS31HJ-331Z	330PF 50V CER.CAPACI	G
	C706	QCS31HJ-331Z	330PF 50V CER.CAPACI	U
	C706	QCS31HJ-331Z	330PF 50V CER.CAPACI	UB
	C706	QCS31HJ-331Z	330PF 50V CER.CAPACI	US
	C706	QCS31HJ-331Z	330PF 50V CER.CAPACI	UT
	C709	QFLB1HJ-821	820PF 50V MYLAR CAPA	
	C710	QFLB1HJ-821	820PF 50V MYLAR CAPA	
	C713	EET2508-226ZE	22MF E.CAPACITO	
	C714	EET2508-226ZE	22MF E.CAPACITO	
	C721	QCS21HJ-220A	22PF 50V CER.CAPACI	
	C722	QCS21HJ-220A	22PF 50V CER.CAPACI	
	C723	QCS31HJ-680Z	68PF 50V CER.CAPACI	
	C724	QCS31HJ-680Z	68PF 50V CER.CAPACI	
	C725	QCS31HJ-680Z	68PF 50V CER.CAPACI	
	C726	QCS31HJ-680Z	68PF 50V CER.CAPACI	
	C727	QFVB1HJ-103	0.01MF 50V THIN FILM	
	C728	QFVB1HJ-103	0.01MF 50V THIN FILM	

RESISTORS

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	R300	QVDB94Z-E15C	100K VARIABLE R	
	R307	QRD161J-392YT	3.9K 1/6W CARBON RES	
	R308	QRD161J-392YT	3.9K 1/6W CARBON RES	
	R309	QRD161J-132YTT	1.3K 1/6W CARBON RES	
	R310	QRD161J-132YTT	1.3K 1/6W CARBON RES	
	R311	QRD161J-132YTT	1.3K 1/6W CARBON RES	
	R312	QRD161J-132YTT	1.3K 1/6W CARBON RES	
	R313	QRD161J-392YT	3.9K 1/6W CARBON RES	
	R314	QRD161J-392YT	3.9K 1/6W CARBON RES	
	R315	QRD161J-100	10 1/6W CARBON RES	
	R316	QRD161J-100	10 1/6W CARBON RES	
	R317	QRD161J-100	10 1/6W CARBON RES	
	R318	QRD161J-100	10 1/6W CARBON RES	
	R321	QVJB84B-E54F	50K VARIABLE R	
	R322	QVJB84B-E54F	50K VARIABLE R	
	R323	QVJB84B-E54C	50K VARIABLE R	
	R361	QRD161J-103	10K 1/6W CARBON RES	
	R362	QRD161J-103	10K 1/6W CARBON RES	
	R701	ERD141J-221S	220 1/4W CARBON RES	
	R702	ERD141J-221S	220 1/4W CARBON RES	
	R703	ERD141J-104SY	100K 1/4W CARBON RES	
	R704	ERD141J-104SY	100K 1/4W CARBON RES	
	R705	QRD14CJ-101S	100 1/4W UNF.CARBON	
	R706	QRD14CJ-101S	100 1/4W UNF.CARBON	
	R707	QRD14CJ-121SX	120 1/4W UNF.CARBON	
	R708	QRD14CJ-121SX	120 1/4W UNF.CARBON	
	R709	QRD161J-101	100 1/6W CARBON RES	
	R710	QRD161J-101	100 1/6W CARBON RES	
	R713	ERD141J-122S	1.2K 1/4W CARBON	BS
	R713	ERD141J-122S	1.2K 1/4W CARBON	EF
	R713	ERD141J-122S	1.2K 1/4W CARBON	EN
	R713	ERD141J-122S	1.2K 1/4W CARBON	G
	R713	ERD141J-122S	1.2K 1/4W CARBON	UB
	R713	ERD141J-122S	1.2K 1/4W CARBON	US
	R713	ERD141J-122S	1.2K 1/4W CARBON	UT
	R714	ERD141J-122S	1.2K 1/4W CARBON	BS
	R714	ERD141J-122S	1.2K 1/4W CARBON	EF
	R714	ERD141J-122S	1.2K 1/4W CARBON	EN
	R714	ERD141J-122S	1.2K 1/4W CARBON	G
	R714	ERD141J-122S	1.2K 1/4W CARBON	U
	R714	ERD141J-122S	1.2K 1/4W CARBON	UB
	R714	ERD141J-122S	1.2K 1/4W CARBON	US
	R714	ERD141J-122S	1.2K 1/4W CARBON	UT
	R715	QRV144F-2201A	2.2K 1/4W CONST.META	
	R716	QRV144F-2201A	2.2K 1/4W CONST.META	
	R717	QRV144F-2701	2.7K 1/4W CONST.META	
	R718	QRV144F-2701	2.7K 1/4W CONST.META	
	R719	QRV144F-2702	27K 1/4W CONST.META	
	R721	QRV144F-2702	27K 1/4W CONST.META	
	R723	QRD14CJ-471SX	470 1/4W UNF.CARBON	
	R724	QRD14CJ-471SX	470 1/4W UNF.CARBON	
	R725	QRD14CJ-560S	56 1/4W UNF.CARBON	
	R726	QRD14CJ-560S	56 1/4W UNF.CARBON	
	R727	QRD161J-332YTT	3.3K 1/6W CARBON RES	
	R728	QRD161J-332YTT	3.3K 1/6W CARBON RES	
	R729	QRD14CJ-331SX	330 1/4W UNF.CARBON	
	R730	QRD14CJ-331SX	330 1/4W UNF.CARBON	
	R731	QRV144F-2702	27K 1/4W CONST.META	
	R732	QRV144F-2702	27K 1/4W CONST.META	
	R733	QRV144F-2702	27K 1/4W CONST.META	
	R734	QRV144F-2702	27K 1/4W CONST.META	
	R735	QRD14CJ-221S	220 1/4W UNF.CARBON	
	R736	QRD14CJ-221S	220 1/4W UNF.CARBON	
	R737	QRD14CJ-101S	100 1/4W UNF.CARBON	
	R738	QRD14CJ-101S	100 1/4W UNF.CARBON	

OTHERS

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMW10440-102A	CIRCUIT BOA	BS
		EMW10440-102A	CIRCUIT BOA	EF
		EMW10440-102A	CIRCUIT BOA	EN
		EMW10440-102A	CIRCUIT BOA	G
		EMW10440-102A	CIRCUIT BOA	U
		EMW10440-102A	CIRCUIT BOA	UB
		EMW10440-102A	CIRCUIT BOA	US
		EMW10440-102A	CIRCUIT BOA	UT
	JA301	EMV7125-012R	CONNECT TER	
	JA321	EMV7125-009R	CONNECT TER	
	JA700	EMV7140-L15R	CONNECT TER	
	PA350	EMV5103-002A	MALE CONNEX	

■ END-099 Premary PC Board ass'y

RESISTORS

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	R001	QRD161J-105	1M 1/6W CARBON RES	U
	R001	QRD161J-105	1M 1/6W CARBON RES	UB
	R001	QRD161J-105	1M 1/6W CARBON RES	US
	R001	QRD161J-105	1M 1/6W CARBON RES	UT
	R002	QRD161J-105	1M 1/6W CARBON RES	U
	R002	QRD161J-105	1M 1/6W CARBON RES	UB
	R002	QRD161J-105	1M 1/6W CARBON RES	US
	R002	QRD161J-105	1M 1/6W CARBON RES	UT
	R003	QRD161J-105	1M 1/6W CARBON RES	U
	R003	QRD161J-105	1M 1/6W CARBON RES	UB
	R003	QRD161J-105	1M 1/6W CARBON RES	US
	R003	QRD161J-105	1M 1/6W CARBON RES	UT

OTHERS

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMW10562-002A	CIR BOARD	BS
		EMW10562-002A	CIR BOARD	EF
		EMW10562-002A	CIR BOARD	EN
		EMW10562-002A	CIR BOARD	G
		EMW10562-002A	CIR BOARD	U
		EMW10562-002A	CIR BOARD	UB
		EMW10562-002A	CIR BOARD	US
		EMW10562-002A	CIR BOARD	UT
		E67132-T3R15	FUSE LABEL	U
		E67132-T3R15	FUSE LABEL	UB
		E67132-T3R15	FUSE LABEL	US
		E67132-T3R15	FUSE LABEL	UT
		QWE880-15RR	VINYL WIRE	U
		QWE880-15RR	VINYL WIRE	UB
		QWE880-15RR	VINYL WIRE	US
		QWE880-15RR	VINYL WIRE	UT
		QWE881-14RR	VINYL WIRE	BS
		QWE881-14RR	VINYL WIRE	EF
		QWE881-14RR	VINYL WIRE	EN
		QWE881-14RR	VINYL WIRE	G
		QWE881-17RR	PIN WIRE	U
		QWE881-17RR	PIN WIRE	UB
		QWE881-17RR	PIN WIRE	US
		QWE881-17RR	PIN WIRE	UT
		QWE882-18RR	VINYL WIRE	U
		QWE882-18RR	VINYL WIRE	UB
		QWE882-18RR	VINYL WIRE	US
		QWE882-18RR	VINYL WIRE	UT
		QWE883-18RR	VINYL WIRE	U
		QWE883-18RR	VINYL WIRE	UB
		QWE883-18RR	VINYL WIRE	US
		QWE883-18RR	VINYL WIRE	UT
		QWE884-20RR	VINYL WIRE	U
		QWE884-20RR	VINYL WIRE	UB
		QWE884-20RR	VINYL WIRE	US
		QWE884-20RR	VINYL WIRE	UT
		QWE886-14RR	VINYL WIRE	BS
		QWE886-14RR	VINYL WIRE	EF
		QWE886-14RR	VINYL WIRE	EN
		QWE886-14RR	VINYL WIRE	G
		QWE886-19RR	VINYL WIRE	U
		QWE886-19RR	VINYL WIRE	UB
		QWE886-19RR	VINYL WIRE	US
		QWE886-19RR	VINYL WIRE	UT
		QWE888-21RR	VINYL WIRE	U
		QWE888-21RR	VINYL WIRE	UB
		QWE888-21RR	VINYL WIRE	US
		QWE888-21RR	VINYL WIRE	UT
		QWE889-18RR	VINYL WIRE	U
		QWE889-18RR	VINYL WIRE	UB
		QWE889-18RR	VINYL WIRE	US
		QWE889-18RR	VINYL WIRE	UT
Δ	S001	QSP4C11-E01	PUSH SWITCH	EF
Δ	S001	QSP4C11-E01	PUSH SWITCH	EN
Δ	S001	QSP4C11-E01	PUSH SWITCH	G
Δ	S001	QSP4C11-E01BS	PUSH SWITCH	BS
	EP001	E70225-001	EARTH PLATE	
	FT101	EMG7331-001	FUSE CLIP	BS
	FT101	EMG7331-001	FUSE CLIP	EF
	FT101	EMG7331-001	FUSE CLIP	EN
	FT101	EMG7331-001	FUSE CLIP	G
	FT101	EMG7331-001	FUSE CLIP	U
	FT101	EMG7331-001	FUSE CLIP	UB
	FT101	EMG7331-001	FUSE CLIP	US
	FT101	EMG7331-001	FUSE CLIP	UT
	FT102	EMG7331-001	FUSE CLIP	BS
	FT102	EMG7331-001	FUSE CLIP	EF
	FT102	EMG7331-001	FUSE CLIP	EN
	FT102	EMG7331-001	FUSE CLIP	G
	FT102	EMG7331-001	FUSE CLIP	U
	FT102	EMG7331-001	FUSE CLIP	UB
	FT102	EMG7331-001	FUSE CLIP	US
	FT102	EMG7331-001	FUSE CLIP	UT
	FT103	EMG7331-001	FUSE CLIP	U
	FT103	EMG7331-001	FUSE CLIP	UB
	FT103	EMG7331-001	FUSE CLIP	US
	FT103	EMG7331-001	FUSE CLIP	UT
	FT104	EMG7331-001	FUSE CLIP	U
	FT104	EMG7331-001	FUSE CLIP	UB
	FT104	EMG7331-001	FUSE CLIP	US
	FT104	EMG7331-001	FUSE CLIP	UT
Δ	RS001	QSR8001-E01U	ROTARY SWIT	U
Δ	RS001	QSR8001-E01U	ROTARY SWIT	UB
Δ	RS001	QSR8001-E01U	ROTARY SWIT	US
Δ	RS001	QSR8001-E01U	ROTARY SWIT	UT




OTHERS

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	TB001	E03891-001	TAB	BS
	TB001	E03891-001	TAB	EF
	TB001	E03891-001	TAB	EN
	TB001	E03891-001	TAB	G
	TB001	E03891-001	TAB	U
	TB001	E03891-001	TAB	UB
	TB001	E03891-001	TAB	US
	TB001	E03891-001	TAB	UT
	TB002	E03891-001	TAB	BS
	TB002	E03891-001	TAB	EF
	TB002	E03891-001	TAB	EN
	TB002	E03891-001	TAB	G
	TB002	E03891-001	TAB	U
	TB002	E03891-001	TAB	UB
	TB002	E03891-001	TAB	US
	TB002	E03891-001	TAB	UT

Accessories List

Symbol No.

M	2	M	M
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	Item	Part Number	Part Name	Q'ty	Description	Area
	1	E30580-2358A	INSTRUCTION BOOK	1		EF,EN,G,BS
		E30580-2360A	INSTRUCTION BOOK	1		U,UB,US,UT
	2	RM-SAF1RU	REMOCON	1		BS,EF,EN,G
		RM-SAF1U	W.LESS REMOCON	1		U,UB,US,UT
	3	R03BPA-2STSA	DRY CELL	1		
	4	E300196-010B	ENVELOPE	1		
	5	ENZ2202-001	SIEMENS PLUG	1		US,
		ENZ2203-001	ADAPTOR PLUG	1		U,UT
	-	BT-20066A	DISTRIBUTOR LIST	1		BS
	-	BT-20134	WARRANTY CARD	1		G
	-	BT-54003-1	WARRANTY CARD	1		BS
	-	E43486-340A	SAFETY SHEET	1		BS

The Marks for Designated Areas

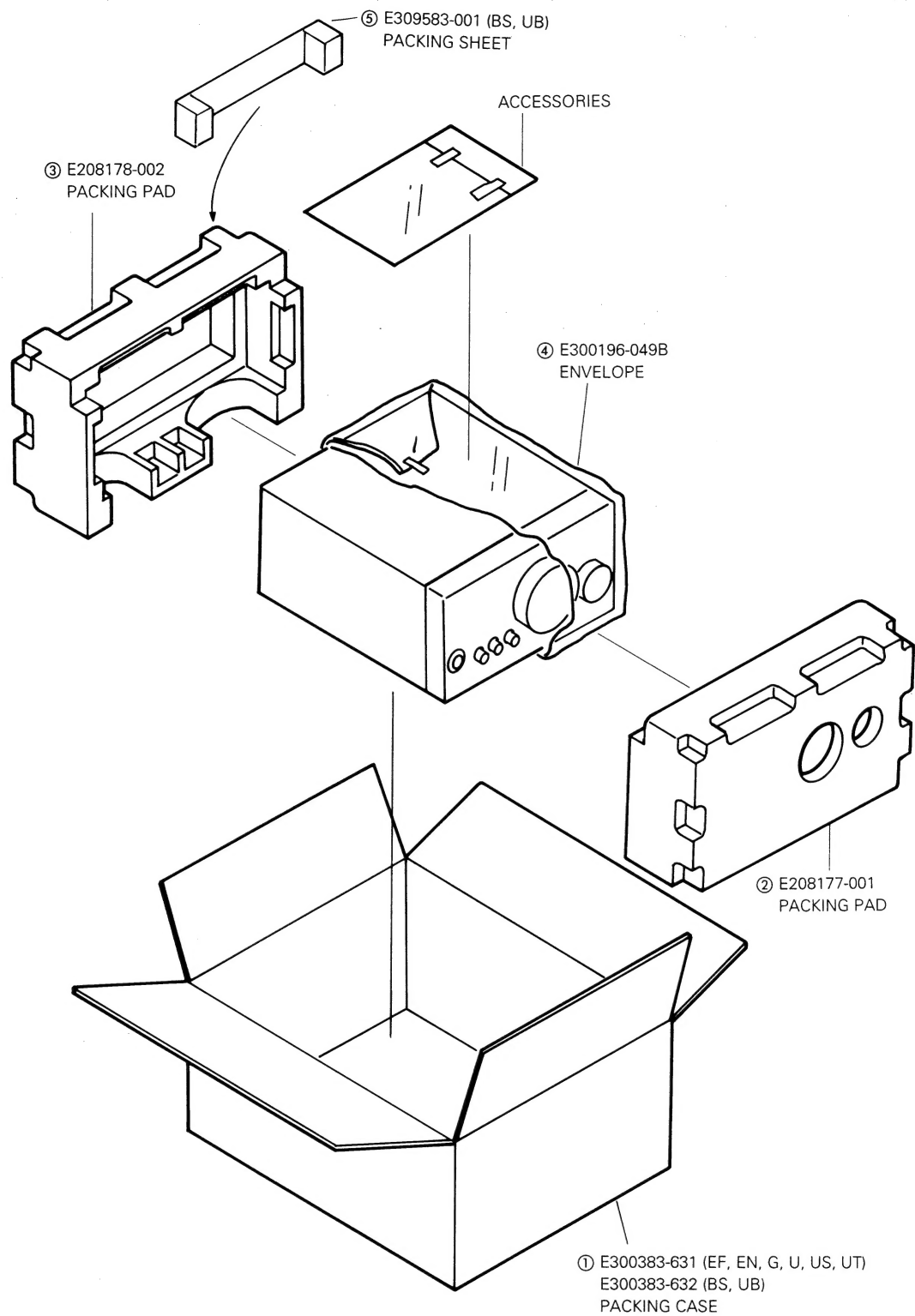
BS the U.K.	EF Continental Europe	G Germany	EN Nordic Countries
UB Hong Kong	US Singapore	UT Taiwan	U Universal

No mark indicates all area.

Packing Materials and Part Numbers

Symbol No.

M	3	M	M
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The Marks for Designated Areas					
BS	the U.K.	EF	Continental Europe Except Germany and Italy
G	....	Germany	EN	.....	Nordic contries
UB	....	Hong Kong	U	.....	Universal
			US	.....	Singapore
			UT	.....	Taiwan
No mark indicates all area.					